

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Technical Memorandum 33-585

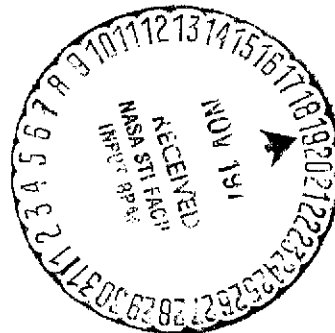
Volume I, Addendum 1

Mariner Mars 1971 Television Picture Catalog

Experiment Design and Picture Data

Dennis Crosby

(NASA-CR-140700) MARINER MARS 1971
TELEVISION PICTURE CATALOG. VOLUME 1,
ADDENDUM 1: EXPERIMENT DESIGN AND
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JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA

August 15, 1974

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1. Report No. 33-585, Vol. I Addendum 1	2. Government Accession No.	3. Recipient's Catalog No.	
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7. Author(s) Dennis Crosby		8. Performing Organization Report No.	
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12. Sponsoring Agency Name and Address NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Washington, D.C. 20546		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract <p>This addendum to the Mariner Mars 1971 Television Picture Catalog, Volume I, comprises footprint plots of the Mariner 9 television mapping of the Martian surface from Rev 100 through Rev 676 and catalogs of the pictures and their quadrangle locations.</p> <div data-bbox="1019 1232 1352 1561" data-label="Image"> </div>			
17. Key Words (Selected by Author(s)) Mariner Mars 1971 Project Planetary Exploration, Advanced Planetary Surfaces Planetary Mapping		18. Distribution Statement Unclassified -- Unlimited	
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1. Report No. 33-681	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle MARINER MARS 1971 ATTITUDE CONTROL SUBSYSTEM		5. Report Date September 15, 1974	
		6. Performing Organization Code	
7. Author(s) Rance S. Edmunds		8. Performing Organization Report No.	
9. Performing Organization Name and Address JET PROPULSION LABORATORY California Institute of Technology 4800 Oak Grove Drive Pasadena, California 91103		10. Work Unit No.	
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12. Sponsoring Agency Name and Address NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Washington, D.C. 20546		13. Type of Report and Period Covered Technical Memorandum	
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15. Supplementary Notes			
16. Abstract <p>The Mariner Mars 1971 attitude control subsystem (ACS) is a three-axis stabilized system that evolved from the Ranger and early Mariner designs. It is comprised of a Sun sensor set, a Canopus tracker, an inertial reference unit, two Cold Gas Reaction Control Assemblies, two rocket engine gimbal actuators, and an attitude control electronics unit. The subsystem has the following eight operating modes: launch, Sun acquisition, roll search, celestial cruise, all-axes inertial, roll inertial, commanded turn, and thrust vector control.</p> <p>In the celestial cruise mode, the position control is held to ± 0.25 deg. Commanded turn rates are ± 0.18 deg/s. The attitude control logic in conjunction with command inputs from other spacecraft subsystems establishes the ACS operating mode. The logic utilizes Sun and Canopus acquisition signals generated within the ACS to perform automatic mode switching so that dependence of ground control is minimized when operating in the Sun acquisition, roll search, and celestial cruise modes. The total ACS weight is 29.8 kg (65.7 lb), and includes 2.4 kg (5.4 lb) of nitrogen gas. Total power requirements vary from 9 W for the celestial cruise mode to 54 W for the commanded turn mode.</p>			
17. Key Words (Selected by Author(s)) Mariner Mars 1971 Project Planetary Spacecraft, Advanced		18. Distribution Statement Unclassified -- Unlimited	
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1. Report No. 33-703	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle VIKING ORBITER 1975 THRUST VECTOR CONTROL SYSTEM ACCURACY		5. Report Date October 15, 1974	
		6. Performing Organization Code	
7. Author(s) L. F. McGlinchey		8. Performing Organization Report No.	
9. Performing Organization Name and Address JET PROPULSION LABORATORY California Institute of Technology 4800 Oak Grove Drive Pasadena, California 91103		10. Work Unit No.	
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		13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Washington, D.C. 20546		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract <p>The purpose of the Thrust Vector Control (TVC) System is to point the engine thrust at the vehicle center of mass and thus maintain attitude stability during propulsive maneuvers. This is accomplished by mounting the engine in a two-axis gimbal system. The TVC system then controls the pointing of the engine by closed loop control of two linear actuators which extend or retract and rotate the engine in its gimbal system.</p> <p>The velocity vector (ΔV) pointing error incurred during a propulsive maneuver is made up of several parts, and the TVC system error is one of these. This error arises because the center of mass and engine thrust are not perfectly aligned.</p> <p>It is the purpose of this memorandum to assess the magnitude of the TVC system portion of the ΔV pointing error and to provide simplified and linearized models for predicting its magnitude for the various propulsive maneuvers. The accuracy of the linearized analysis is verified using a detailed nonlinear six-degree-of-freedom computer simulation.</p> <p>The Jet Propulsion Laboratory is responsible for the Viking Orbiter System, which is part of the overall Viking Project managed by the Viking Project</p>			
17. Key Words (Selected by Author(s)) Control and Guidance Planetary Spacecraft, Advanced Propulsion, Liquid Viking Project		18. Distribution Statement Unclassified -- Unlimited	
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12. Sponsoring Agency Name and Address NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Washington, D.C. 20546		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract Office at Langley Research Center for NASA. The spacecraft will be launched on a Titan III-E/Centaur launch vehicle in August 1975.			
17. Key Words (Selected by Author(s))		18. Distribution Statement	
19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price

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1. Report No. 33-706	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle TRAJECTORY SELECTION FOR THE MARINER JUPITER/SATURN 1977 PROJECT		5. Report Date October 15, 1974	
		6. Performing Organization Code	
7. Author(s) James S. Dyer, Ralph F. Miles, Jr.		8. Performing Organization Report No.	
9. Performing Organization Name and Address JET PROPULSION LABORATORY California Institute of Technology 4800 Oak Grove Drive Pasadena, California 91103		10. Work Unit No.	
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12. Sponsoring Agency Name and Address NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Washington, D.C. 20546		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This article describes the use of decision analysis to facilitate a group decision-making problem in the selection of trajectories for the two Spacecraft of the Mariner Jupiter/Saturn 1977 Project. This NASA project includes the participation of some 80 scientists divided by specialization among 11 science teams. A set of 32 candidate trajectory pairs was developed by the Project in collaboration with the science teams. Each science team then ordinarily ranked and assigned cardinal utility function values to the trajectory pairs. The data and statistics derived from collective choice rules were used by the scientists in selecting the science-preferred trajectory pair.			
17. Key Words (Selected by Author(s)) Mariner Jupiter-Saturn 1977 Project Orbits and Trajectories		18. Distribution Statement Unclassified -- Unlimited	
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4. Title and Subtitle SYMBOLIC INTEGRATION OF A CLASS OF ALGEBRAIC FUNCTIONS		5. Report Date October 15, 1974	
		6. Performing Organization Code	
7. Author(s) Edward W. Ng		8. Performing Organization Report No.	
9. Performing Organization Name and Address JET PROPULSION LABORATORY California Institute of Technology 4800 Oak Grove Drive Pasadena, California 91103		10. Work Unit No.	
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12. Sponsoring Agency Name and Address NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Washington, D.C. 20546		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract An algorithm, based on a series of analyses by Carlson, is presented for the symbolic integration of a class of algebraic functions. This class consists of functions made up of rational expressions of an integration variable x and square roots of polynomials, trigonometric and hyperbolic functions of x . The algorithm is constituted of four major components, viz., (i) reduction of input integrand to canonical form, (ii) intermediate internal representation of integral, (iii) classification of output, and (iv) reduction and simplification of output to well-known functions. In the oral presentation, the algorithmic outline as well as some simple examples will be described.			
17. Key Words (Selected by Author(s)) Computer Programs Mathematical Sciences		18. Distribution Statement Unclassified -- Unlimited	
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4. Title and Subtitle THE DEEP SPACE NETWORK PROGRESS REPORT JULY AND AUGUST 1974		5. Report Date October 15, 1974	
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7. Author(s) JPL Staff		8. Performing Organization Report No.	
9. Performing Organization Name and Address JET PROPULSION LABORATORY California Institute of Technology 4800 Oak Grove Drive Pasadena, California 91103		10. Work Unit No.	
		11. Contract or Grant No. NAS 7-100	
		13. Type of Report and Period Covered DSN Progress Report	
12. Sponsoring Agency Name and Address NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Washington, D.C. 20546		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This report describes work performed for the JPL/NASA Deep Space Network (DSN). Progress is presented on DSN supporting research and technology, advanced development and engineering, and implementation, and DSN operations which pertain to mission-independent or multiple-mission development as well as to support of flight projects. Each issue contains a description of the functions and facilities of the DSN.			
17. Key Words (Selected by Author(s)) Antennas and Transmission Lines Information Theory Telemetry and Command Tracking		18. Distribution Statement Unclassified -- Unlimited	
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Volume I, Addendum 1

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Experiment Design and Picture Data

Dennis Crosby

JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA

August 15, 1974

Prepared Under Contract No. NAS 7-100
National Aeronautics and Space Administration

Preface

The work described in this report was performed by the Space Sciences Division of the Jet Propulsion Laboratory, under the cognizance of the Mariner Mars 1971 Project.

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Contents

I. Introduction	1
A. Science Cycles	1
B. Science Sequences	1
II. Mercator Projections: Wide-Angle Camera Coverage	5
III. Polar Stereographic Projections of the South Pole: Wide-Angle Camera Coverage	15
IV. Polar Stereographic Projections of the South Pole: Narrow-Angle Camera Coverage	25
V. Polar Stereographic Projections of the North Pole: Wide-Angle Camera Coverage	37
VI. Polar Stereographic Projections of the North Pole: Narrow-Angle Camera Coverage	45
Table	
1. Surface feature locations	3
Figures	
1. Index map	2
Mercator Projections: Wide-Angle Camera Coverage	
2. Mapping Cycle I, Geodesy, Revs 100-138	7
3. Mapping Cycle II, Geodesy, Revs 139-177; Mapping Cycle III, Mapping, Revs 178-216	8
4. Mapping Cycles I and II, Mapping, Revs 100-177	9
5. Mapping Cycle I, Non-Mapping and Non-Geodesy, Revs 100-138	10
6. Mapping Cycle II, Non-Mapping and Non-Geodesy, Revs 139-177	11
7. Mapping Cycle III, Non-Mapping and Non-Geodesy, Revs 178-216	12
8. Extended Mission, Phase I, Revs 218-262	13
9. Extended Mission, Phase II, Revs 416-676	14
Polar Stereographic Projections of the South Pole: Wide-Angle Camera Coverage	
10. Mapping Cycle IA, Non-Global, Revs 100-118	17
11. Mapping Cycle IA, Global, Revs 100-118	18

Contents (contd)

12. Mapping Cycle IB, Non-Global, Revs 119-138	19
13. Mapping Cycle IB, Global, Revs 119-138	20
14. Mapping Cycle II, Revs 139-177	21
15. Mapping Cycle III, Revs 178-217	22
16. Extended Mission, Phase I, Revs 218-262	23

Polar Stereographic Projections of the South Pole: Narrow-Angle Camera Coverage

17. Mapping Cycle I, Revs 100-138	27
18. Mapping Cycle IIA, Revs 139-159	28
19. Mapping Cycle IIB, Revs 160-177	29
20. Mapping Cycle IIIA, Revs 178-188	30
21. Mapping Cycle IIIB, Revs 189-204	31
22. Mapping Cycle IIIC, Revs 205-217	32
23. Extended Mission, Phase IA, Revs 218-226	33
24. Extended Mission, Phase IB, Revs 227-235	34
25. Extended Mission, Phase IC, Revs 236-262	35

Polar Stereographic Projections of the North Pole: Wide-Angle Camera Coverage

26. Mapping Cycle II, Revs 139-177	39
27. Mapping Cycle IIIA, Revs 178-196	40
28. Mapping Cycle IIIB, Revs 197-217	41
29. Extended Mission, Phase I, Revs 218-262	42
30. Extended Mission, Phase IIA, Non-Global, Revs 416-431	43
31. Extended Mission, Phase IIB, Non-Global, Revs 436-676	44

Polar Stereographic Projections of the North Pole: Narrow-Angle Camera Coverage

32. Mapping Cycle III, Revs 178-217	47
33. Extended Mission, Phase I, Revs 218-262	48
34. Extended Mission, Phases II, III, IV, Revs 416-676	49

Abstract

This addendum to the *Mariner Mars 1971 Television Picture Catalog, Volume I*, comprises footprint plots of the Mariner 9 television mapping of the Martian surface from Rev 100 through Rev 676 and catalogs of the pictures and their quadrangle locations.

I. Introduction

The air-brushed relief maps included in this addendum to the *Mariner Mars 1971 Television Picture Catalog, Vol. I*, show a portion of the Mariner 9 television coverage of the surface of Mars. The footprint plots are Mercator projections in the interval 70°S to 70°N latitude, polar stereographic projections in the interval 65°S to 90°S latitude for the south pole, and 65°N to 90°N latitude for the north pole. The footprint outlines are rectified, and the planet limb is shown as a jagged line.

The footprints are identified either by the data automation subsystem (DAS) time or by the revolution number followed by the last four digits of the DAS time. These identifiers appear at reticle 1 (upper left hand corner of the picture), unless this corner is outside the plot area. In this case, they are located at the first corner (rotated clockwise) that appears within the plot area.

Because the Martian surface was obscured by dust during the first 100 revolutions of Mariner 9, the footprint plots for the pictures taken during this period were not generated.

The pictures are subdivided into combinations of the following science cycles and science sequences:

A. Science Cycles

- (1) Mapping cycle I, Revs 100-138.

- (2) Mapping cycle II, Revs 139-177.
- (3) Mapping cycle III, Revs 178-217.
- (4) Extended mission, Phase I, Revs 218-262.
- (5) Extended mission, Phase II, Revs 416-676.

B. Science Sequences

- (1) Mapping.
- (2) Geodesy.
- (3) Global and/or atmospheric.
- (4) Targeted (all those not listed above).

Each map in this document may be obtained from the National Space Science Data Center (NSSDC) at larger scales (1:25,000,000 for Mercator and 1:5,000,000 for stereographic) as line drawings without surface features. A reference set of positive transparencies of these maps is filed in the Science Data Library at the Jet Propulsion Laboratory.

Figure 1 is an index map of the quadrangle locations. Locations of the surface features are listed in Table 1.

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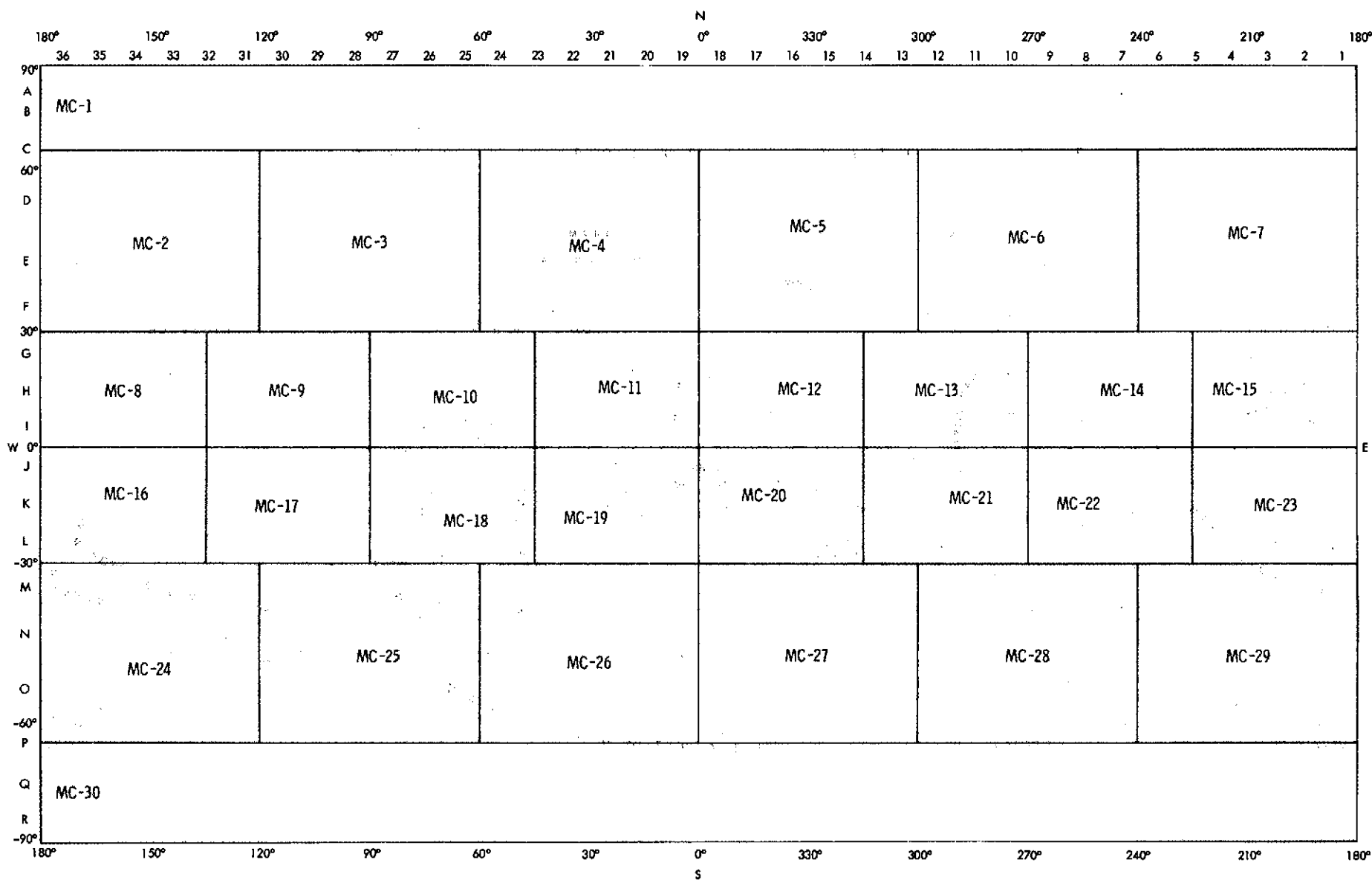
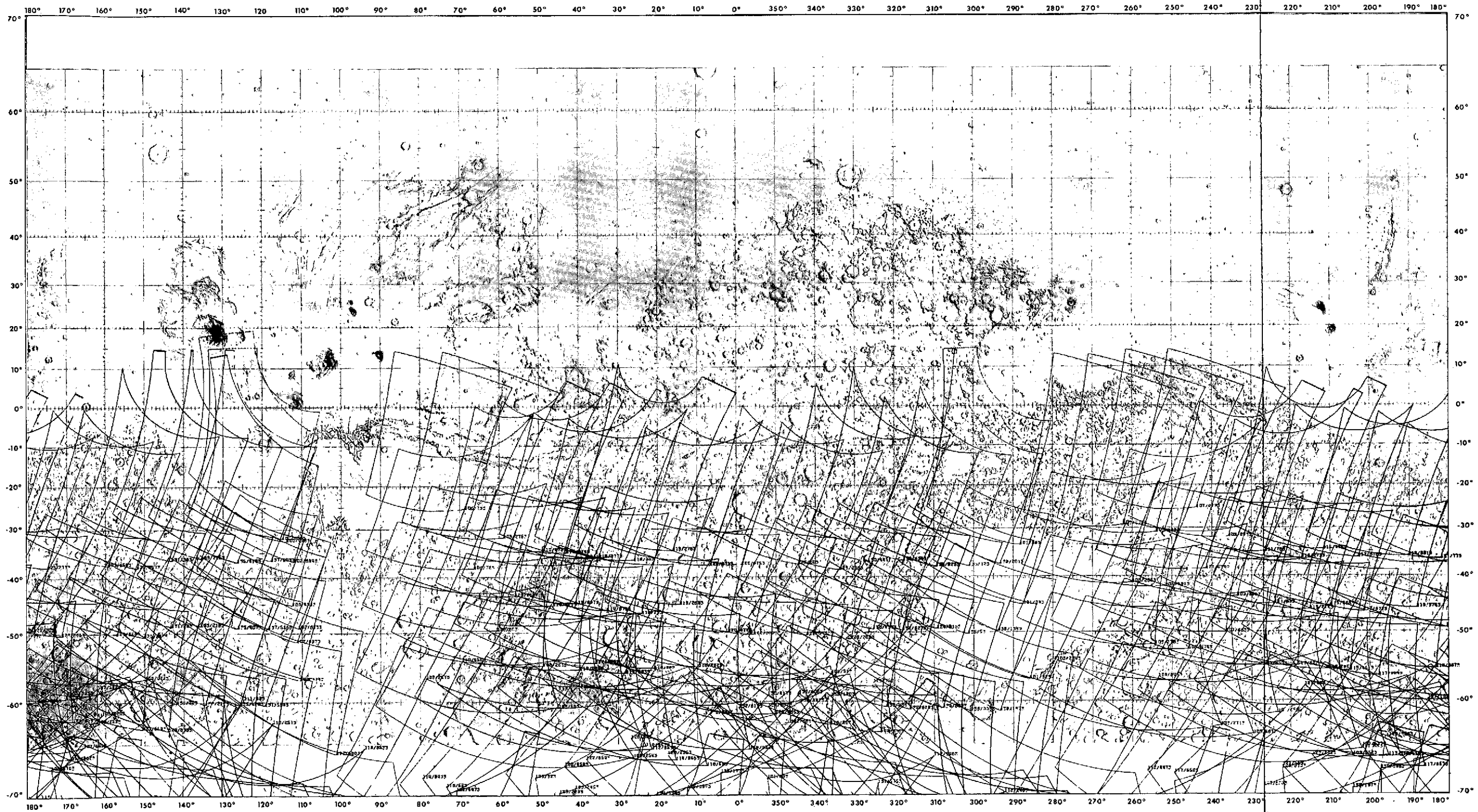


Fig. 1. Index map.

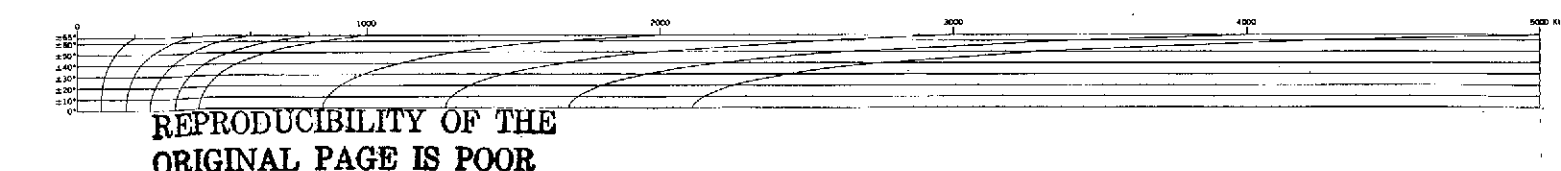
Table 1. Surface feature locations.

AREA	LAT	LONG	AREA	LAT	LONG	AREA	LAT	LONG	AREA	LAT	
ACHILLIS PONS	39	30	DELTOTON SINUS	- 7	305	MEMNONIA	-20	145	RIMA AUGUSTA	-73	50
ACIDALIUM, MARL	48	30	DEUCALIONIS REGIO	-16	344	MEKIPIANI SINUS	- 8	0	RIMA AUSTRALIS	-73	335
ACIDALIUS FONS	50	73	DEUTHERONILUS	35	359	MERUE	34	291	RIMA BREVIS	-72	292
AEOLIS	- 5	210	DIA	-61	84	MESOGALA	0	180	SABAEUS SINUS	-11	328
AERIA	15	309	DIACRIA	47	164	MOAB	18	340	SCAMANDER	-49	196
AETHERIA	35	240	DIOSCURIA	49	319	MOERIS LACUS	9	271	SCANDIA	62	150
AETHIOPIA	5	238	EDEN	18	351	MONS ARGENTINA	-70	30	SERPENTIS, MARL	-25	321
ALBA	41	107	EDOM	- 3	345	MORPHEOS LACUS	35	230	SILOE FONS	35	5
AMAZONIS	3	154	ELECTRIS	-45	180	NECTAR	-28	65	SIMOIS	-48	161
AMENTHES	9	256	ELYSIUM	23	216	NEITH REGIO	35	272	SINAI (THAUMASIA)	-17	75
AOINIUS SINUS	-51	115	EOS	-15	36	NEPENTHES	17	265	SIRENUM, MARL	-32	154
ARABIA	22	324	ERIDANIA	-46	220	NEREIDUM FRETUM	-43	51	SIRENUM SINUS	-35	131
ARAM	- 3	14	ERYTHRAEUM, MARL	-33	25	NILIACUS LACUS	34	33	SITHONIUS LACUS	53	237
ARAXES	-27	125	EUNOSTIOS	12	225	NILOKERAS	35	58	SOLIS LACUS	-27	85
ARCADIA	49	125	EUPHRATES	15	334	NILUSYNTIS	39	280	SOUTH POLAR CAP CENTER	-84	30
ARETHUSA LACUS	59	338	EUXINUS LACUS	44	157	NIX OLYMPICA	20	138	STYX	20	202
ARGYRE I	-45	30	GANGES	8	63	NOACHIS	-43	350	SYRIA	-20	97
ARGYRE II	-68	72	GEHON	15	358	NOCTIS LACUS	-10	95	SYRTIS MAJOR	10	249
ARNON	50	335	GOMER SINUS	- 5	225	NOIUS ALCYONIUS	32	256	SYRTIS MINOR	-10	261
ASCRAEUS LACUS	19	105	GORGONUM SINUS	-30	149	NOIUS GORDII	- 5	129	TANAIIS	50	57
ATLANTIS	-33	166	GYNDES	55	215	NOIUS LAOCOONIS	20	248	TEMPL	45	65
AURORAE SINUS	-12	49	HADRIACUM, MARL	-35	275	NORTH POLAR CAP CENTER	89	290	THAKSIS	- 2	105
AUSONIA	-37	247	HAMMONIS CORNU	- 5	320	NOTI SINUS	-63	204	THAUMASIA	-36	84
AUSTRALE, MARL	-63	26	HEBES LACUS	- 1	83	NOTUS	-71	212	THOANA PALUS	29	248
BATHYS PORTUS	-41	110	HECATES LACUS	38	205	NOVISSIMA THYLE	-72	314	THOTH	33	255
BIBLIS FONS	17	133	HELLAS	-47	295	NOVUS MONS	-70	320	THYLE I	-68	152
BORLOSURTIS	55	300	HELLESPONTICA, DEPRESSIO	-60	344	NUBIS LACUS	20	260	THYLE II	-66	225
BORLUM, MARL	57	90	HELLESPONTUS	-40	322	OENOTHIA	- 2	298	THYLES COLLIS	-71	232
BOSPOROS	-41	75	HEPHAESTUS	21	240	OGYGIS REGIO	-40	60	THYLES MONS	-73	154
CANDOR	5	74	HERCULIS PONS	50	180	OLYMPIA	80	210	THYMIAATA	15	6
CAPRI CORNU	-20	50	HESPERIA	-19	240	OPHIR	- 9	66	TIPHYS FRETUM	-56	210
CARALIS FONS	-42	155	HIDDEKEL	15	346	ORTYGLA	61	350	TITANUM SINUS	-20	169
CASIUS	40	264	HOUGERIA	31	139	OXIA	21	16	TITHONIUS LACUS	- 2	85
CASTORIUS LACUS	54	155	HOUGERIIUS LACUS	20	125	OXIA PALUS	11	18	TRACTUS ALBUS (AUSTRALIS)	- 5	100
CEBKENIA	47	215	HYBLAEUS	26	233	OXUS	10	21	TRACTUS ALBUS (BOREALIS)	25	275
CECROPIA	65	310	HYPERBOREUS LACUS	75	60	PALINUHI FRETUM	-59	146	THINACRIA (AUSONIA BOREALIS)	-20	275
CERAUNIUS	25	95	HYPERNOTIUS MONS	-66	28	PAMOTIS LACUS	7	218	TRIGONIS SINUS	- 6	245
CERBERUS	10	200	IAPYGLA	-16	298	PANCHAIA	62	210	TRIVIUM CHARONTIS	15	200
CHALCE	-48	0	ICARIA	-40	122	PANDORAE FRETUM	-25	345	TYRRHENUM, MARL	-22	252
CHAOS	39	215	IDAEUS FON	30	52	PARVA, DEPRESSIO	-72	175	UCHRONIA	70	260
CHERSONESUS	-54	261	ISIDIS REGIO	20	275	PARVIS LACUS	1	120	ULTIMUM PROM.	-73	179
CHRONIUM, MARL	-60	180	ISMENIUS LACUS	40	334	PALEUS	-48	280	ULYXIS FRETUM	-73	195
CHRYSE	9	35	JANUNA	15	35	PHALANTHOS	-47	139	UMBRA	49	287
CHRYSOKERAS	-55	99	JUVENTAE FONS	- 5	62	PHISON	15	320	UTOPIA	53	244
CIMMERIUM, MARL	-32	207	LAESTRYGON	- 5	198	PHLEGRA	31	191	VULCANI PELAGUS	-35	15
CLARITAS	-32	102	LAESTRYGONUM SINUS	-32	200	PHOLNICIS LACUS	-15	108	XANTHE	14	52
COLOE PALUS	43	297	LEMURIA	65	210	PROMETHLI SINUS	-64	262	XANTHUS	-45	230
COPAIS PALUS	56	275	LIBYA	- 1	270	PROPONTIS I	45	140	YAONIS FRETUM	-34	310
COPRATES	-15	61	LUNAE PALUS	20	65	PROPONTIS II	54	180	YAONIS REGIO	-35	315
CROCEA	- 5	285	MAEOTIS PALUS	51	124	PROIEL REGIO	-23	50	ZEA LACUS	-47	289
CYCLOPIA	- 2	225	MAGNA, DEPRESSIO	-79	270	PROTONIUS	42	213	ZEPHYRIA	-10	180
CYCLOPUM SINUS	-10	227	MAHEOTIS LACUS	32	92	PRUMTHEI SINUS	-63	250			
CYDONIA	46	356	MARGARITIFEH SINUS	-13	22	PYRRHAE REGIO	-25	22			
DAEDALIA	-25	120	MELAS LACUS	-13	74	RASENA	-26	191			

II. Mercator Projections: Wide-Angle Camera Coverage



SHADED RELIEF MAP OF MARS
MARINER 9 TV PICTURE COVERAGE



Rev	DAS	Time	Quad	Rev	DAS	Time	Quad
100	5164733	MC-30		120	5884583	MC-26	
101	5164773	MC-24		121	5884723	MC-26	
102	5164843	MC-24		122	5884793	MC-19	
103	5164913	MC-24		123	5920493	MC-30	
104	5164983	MC-17		124	5920563	MC-30	
105	5200583	MC-30		125	5920633	MC-29	
106	5200653	MC-28		126	5920703	MC-29	
107	5200723	MC-28		127	5920773	MC-23	
108	5200793	MC-21		128	5956473	MC-30	
109	5200863	MC-17		129	5956543	MC-26	
110	5236733	MC-25		130	5956613	MC-26	
111	5236803	MC-25		131	5956683	MC-26	
112	5236873	MC-25		132	5956753	MC-19	
113	5236943	MC-17		133	5992453	MC-30	
114	5272643	MC-28		134	5992523	MC-30	
115	5272713	MC-28		135	5992593	MC-29	
116	5272783	MC-28		136	5992663	MC-29	
117	5272853	MC-28		137	5992733	MC-23	
118	5272923	MC-21		138	6100323	MC-30	
119	5344603	MC-30		139	6100393	MC-27	
120	5344673	MC-28		140	6100463	MC-27	
121	5344743	MC-28		141	6100533	MC-27	
122	5344813	MC-28		142	6100603	MC-25	
123	5344883	MC-22		143	6136303	MC-30	
124	5380513	MC-25		144	6136373	MC-30	
125	5380583	MC-25		145	6136443	MC-24	
126	5380653	MC-25		146	6136513	MC-24	
127	5380723	MC-18		147	6136583	MC-18	
128	5380793	MC-18		148	6172283	MC-30	
129	5416493	MC-28		149	6172353	MC-27	
130	5416563	MC-28		150	6172423	MC-27	
131	5416633	MC-28		151	6172493	MC-27	
132	5416703	MC-22		152	6172563	MC-20	
133	5416773	MC-22		153	6208193	MC-30	
134	5452473	MC-30		154	6208263	MC-24	
135	5452543	MC-25		155	6208333	MC-24	
136	5452613	MC-25		156	6208403	MC-24	
137	5452683	MC-25		157	6208473	MC-16	
138	5452753	MC-18		158	6244173	MC-30	
139	5488453	MC-30		159	6244243	MC-27	
140	5488523	MC-28		160	6244313	MC-27	
141	5488593	MC-28		161	6244383	MC-27	
142	5488663	MC-28		162	6244453	MC-20	
143	5488733	MC-22		163	6280083	MC-30	
144	5524503	MC-30		164	6280153	MC-24	
145	5524573	MC-26		165	6280223	MC-24	
146	5524643	MC-26		166	6280293	MC-24	
147	5524713	MC-26		167	6290363	MC-16	
148	5524783	MC-18		168	6316063	MC-30	
149	5560483	MC-30		169	6316133	MC-27	
150	5560553	MC-29		170	6316203	MC-27	
151	5560623	MC-29		171	6316273	MC-27	
152	5560693	MC-29		172	6316343	MC-20	
153	5560763	MC-22		173	6351973	MC-30	
154	5596463	MC-30		174	6352043	MC-24	
155	5596533	MC-26		175	6352113	MC-24	
156	5596603	MC-26		176	6352183	MC-24	
157	5596673	MC-26		177	6352253	MC-16	
158	5596743	MC-18		178	6387953	MC-30	
159	5632513	MC-30		179	6388023	MC-27	
160	5632583	MC-29		180	6388093	MC-27	
161	5632653	MC-29		181	6388163	MC-27	
162	5632723	MC-29		182	6388233	MC-20	
163	5632793	MC-22		183	6423663	MC-30	
164	5668493	MC-30		184	6423913	MC-24	
165	5668563	MC-26		185	6424003	MC-24	
166	5668633	MC-26		186	6424073	MC-24	
167	5668703	MC-26		187	6424143	MC-17	
168	5668773	MC-19		188	6459843	MC-30	
169	5704473	MC-30		189	6459913	MC-27	
170	5704543	MC-29		190	6459983	MC-27	
171	5704613	MC-29		191	6460053	MC-27	
172	5704683	MC-29		192	6460123	MC-21	
173	5704753	MC-23		193	6460193	MC-30	
174	5740523	MC-30		194	6495823	MC-24	
175	5740593	MC-26		195	6495893	MC-24	
176	5740663	MC-26		196	6495963	MC-24	
177	5740733	MC-26		197	6496033	MC-17	
178	5740803	MC-19		198	6531713	MC-30	
179	5776503	MC-30		199	6531803	MC-27	
180	5776573	MC-29		200	6531873	MC-27	
181	5776643	MC-29		201	6531943	MC-27	
182	5776713	MC-29		202	6532013	MC-21	
183	5776783	MC-23					
184	5812483	MC-30					
185	5812553	MC-26					
186	5812623	MC-26					
187	5812693	MC-26					
188	5812763	MC-19					
189	5848533	MC-30					
190	5848603	MC-29					
191	5848673	MC-29					
192	5848743	MC-29					
193	5848813	MC-23					
194	5884513	MC-30					

Fig. 2. Mapping Cycle I, Geodesy, Revs 100-138.

Rev DAS-Time Quad	Rev DAS-Time Quad	Rev DAS-Time Quad	Rev DAS-Time Quad	Rev DAS-Time Quad	Rev DAS-Time Quad
139 6571043 MC-12	170 7687293 MC-11	185 8225249 MC-24	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
139 6571013 MC-12	170 7687163 MC-11	185 8225319 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
140 6607823 MC-8	171 7723203 MC-15	185 8225389 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
140 6607893 MC-8	171 7723273 MC-15	185 8225459 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
140 6627963 MC-8	171 7723343 MC-15	185 8225529 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
141 6643593 MC-12	172 7759113 MC-11	185 8225599 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
141 6643603 MC-12	172 7759183 MC-11	185 8225669 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
141 6643673 MC-12	172 7759253 MC-11	185 8225739 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
141 6643743 MC-12	173 7795093 MC-15	185 8225809 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
142 6679713 MC-8	173 7795163 MC-15	185 8225879 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
142 6679783 MC-8	173 7795233 MC-15	185 8225949 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
142 6679853 MC-8	174 7831053 MC-11	185 8226019 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
143 6715693 MC-12	174 7831123 MC-11	185 8226089 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
143 6715763 MC-12	174 7831193 MC-11	185 8226159 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
143 6715833 MC-12	175 7866983 MC-15	185 8226229 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
144 6751673 MC-8	175 7867053 MC-15	185 8226299 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
144 6751743 MC-8	176 7902893 MC-11	185 8226369 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
144 6751813 MC-8	176 7902963 MC-11	185 8226439 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
145 6787653 MC-12	176 7903033 MC-11	185 8226509 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
145 6787723 MC-12	177 7938873 MC-8	185 8226579 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
146 6823773 MC-8	177 7938943 MC-8	185 8226649 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
146 6823843 MC-8	177 7939013 MC-8	185 8226719 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
147 6859663 MC-12	178 7973453 MC-19	185 8226789 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
147 6859733 MC-12	178 7973523 MC-19	185 8226859 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
147 6859803 MC-12	178 7973593 MC-19	185 8226929 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
148 6895593 MC-9	178 7973663 MC-19	185 8226999 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
148 6895663 MC-9	178 7973733 MC-19	185 8227069 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
148 6895733 MC-9	178 7973803 MC-19	185 8227139 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
149 6931643 MC-13	178 7973873 MC-19	185 8227209 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
149 6931713 MC-13	179 8009413 MC-23	185 8227279 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
150 6967623 MC-9	179 8009483 MC-23	185 8227349 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
150 6967693 MC-9	179 8009553 MC-23	185 8227419 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
151 7003603 MC-13	179 8009623 MC-23	185 8227489 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
151 7003673 MC-13	179 8009693 MC-23	185 8227559 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
151 7003743 MC-13	179 8009763 MC-23	185 8227629 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
152 7039583 MC-9	179 8009833 MC-23	185 8227699 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
152 7039653 MC-9	179 8009903 MC-23	185 8227769 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
152 7039723 MC-9	179 8009973 MC-23	185 8227839 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
153 7075703 MC-13	179 8010043 MC-23	185 8227909 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
153 7075773 MC-13	179 8010113 MC-23	185 8227979 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
153 7075843 MC-13	179 8010183 MC-23	185 8228049 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
154 7111613 MC-9	179 8010253 MC-23	185 8228119 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
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155 7147733 MC-13	179 8010533 MC-23	185 8228399 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
155 7147803 MC-13	179 8010603 MC-23	185 8228469 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
156 7183643 MC-9	179 8010673 MC-23	185 8228539 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
156 7183713 MC-9	179 8010743 MC-23	185 8228609 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
156 7183783 MC-9	179 8010813 MC-23	185 8228679 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
157 7219623 MC-13	179 8010883 MC-23	185 8228749 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
157 7219693 MC-13	179 8010953 MC-23	185 8228819 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
157 7219763 MC-13	179 8011023 MC-23	185 8228889 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
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161 7363613 MC-14	179 8011583 MC-23	185 8229449 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
161 7363683 MC-14	179 8011653 MC-23	185 8229519 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
161 7363753 MC-14	179 8011723 MC-23	185 8229589 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
162 7399593 MC-10	179 8011793 MC-23	185 8229659 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
162 7399663 MC-10	179 8011863 MC-23	185 8229729 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
162 7399733 MC-10	179 8011933 MC-23	185 8229799 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
163 7435573 MC-14	179 8012003 MC-23	185 8229869 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
163 7435643 MC-14	179 8012073 MC-23	185 8229939 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
163 7435713 MC-14	179 8012143 MC-23	185 8229999 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
164 7471553 MC-10	179 8012213 MC-23	185 8230069 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
164 7471623 MC-10	179 8012283 MC-23	185 8230139 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
164 7471693 MC-10	179 8012353 MC-23	185 8230209 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
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165 7507533 MC-14	179 8012493 MC-23	185 8230349 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
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167 7579493 MC-14	179 8012913 MC-23	185 8230769 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
167 7579563 MC-14	179 8012983 MC-23	185 8230839 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
168 7615333 MC-11	179 8013053 MC-23	185 8230909 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
168 7615403 MC-11	179 8013123 MC-23	185 8230979 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
168 7615473 MC-11	179 8013193 MC-23	185 8231049 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
169 7651313 MC-15	179 8013263 MC-23	185 8231119 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
169 7651383 MC-15	179 8013333 MC-23	185 8231189 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
169 7651453 MC-15	179 8013403 MC-23	185 8231259 MC-16	194 8549419 MC-21	203 8873519 MC-18	212 9198809 MC-7
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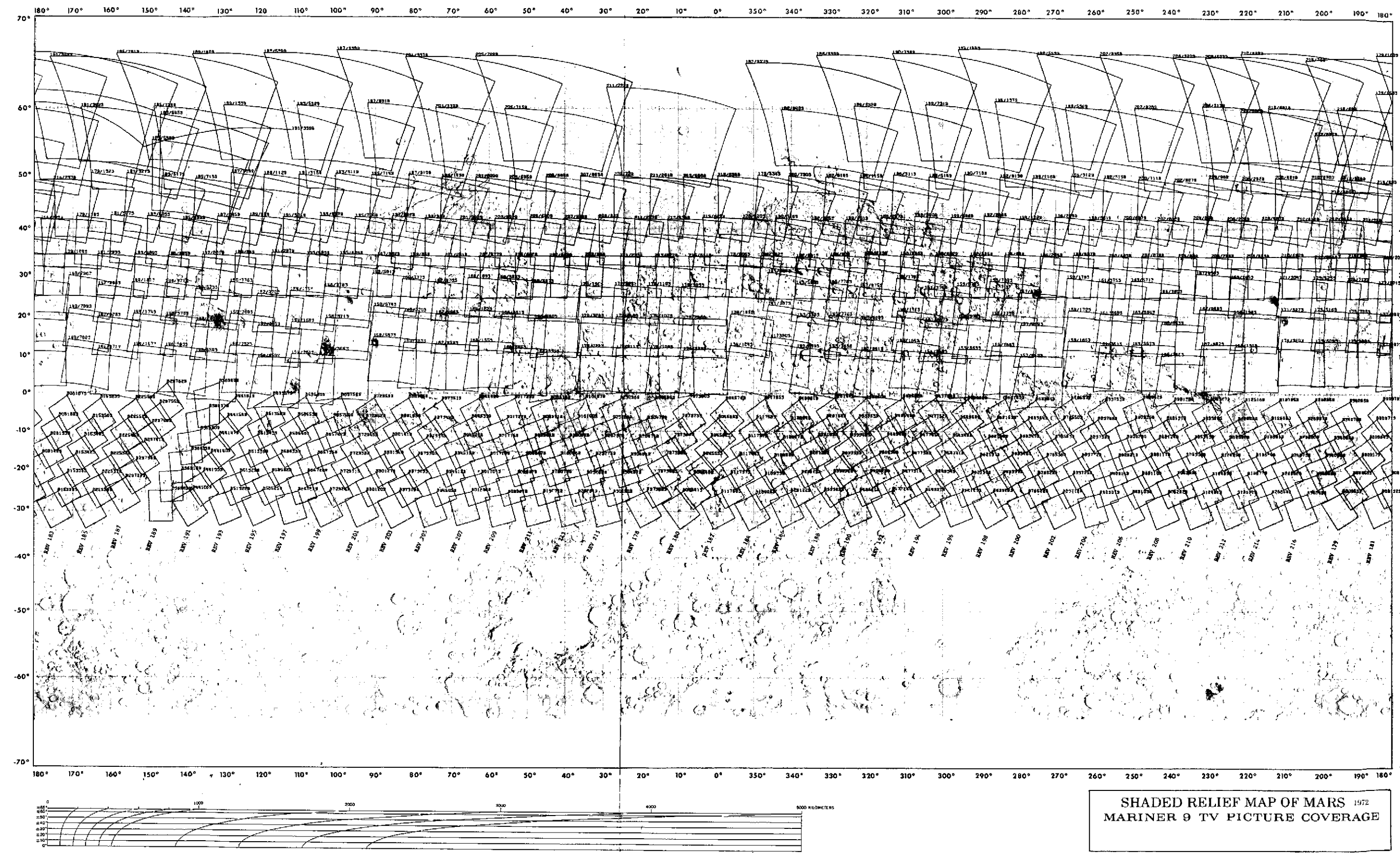


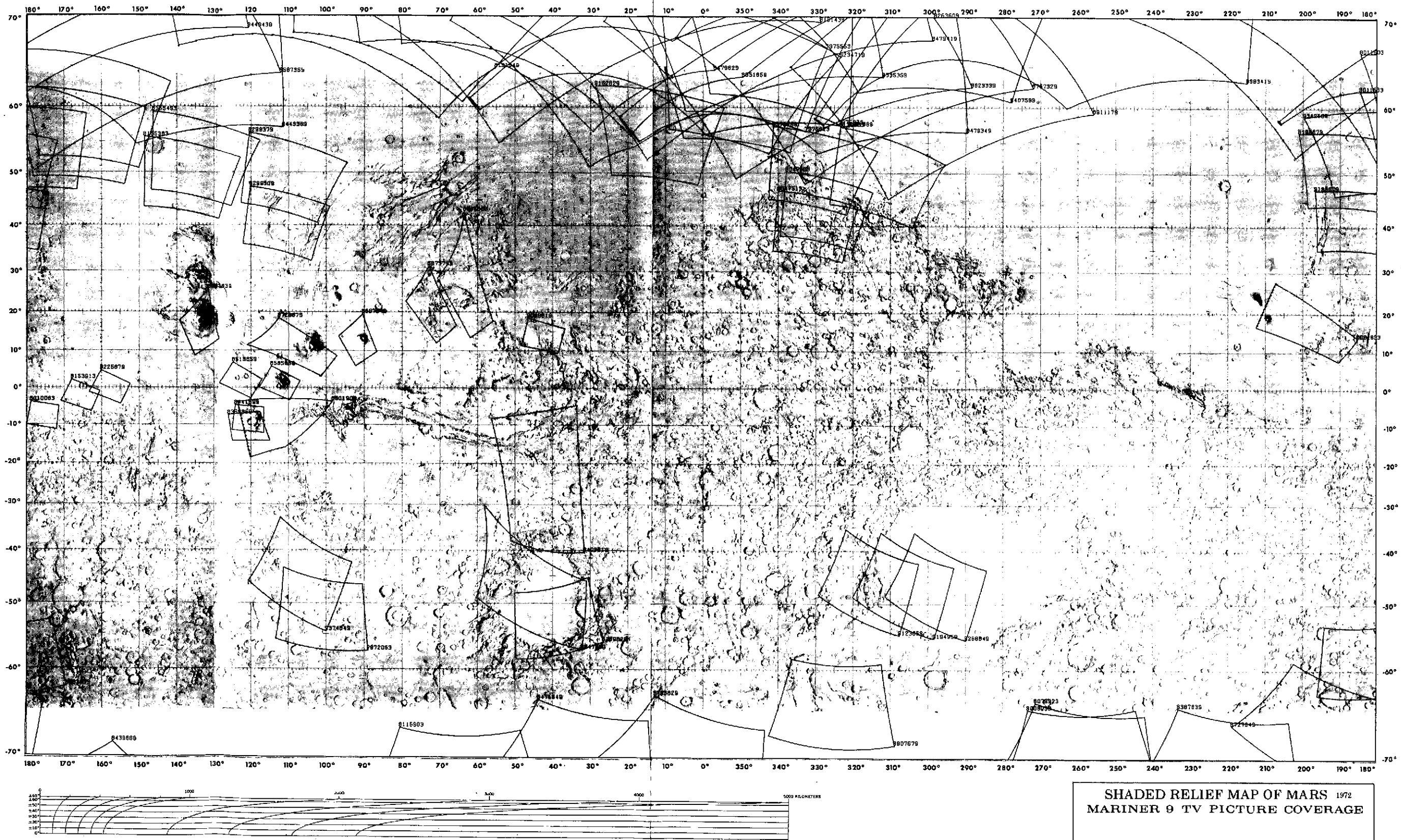
Fig. 3. Mapping Cycle II, Geodesy, Revs 139-177; Mapping Cycle III, Mapping, Revs 178-216.

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Rev DAS-Time Quad

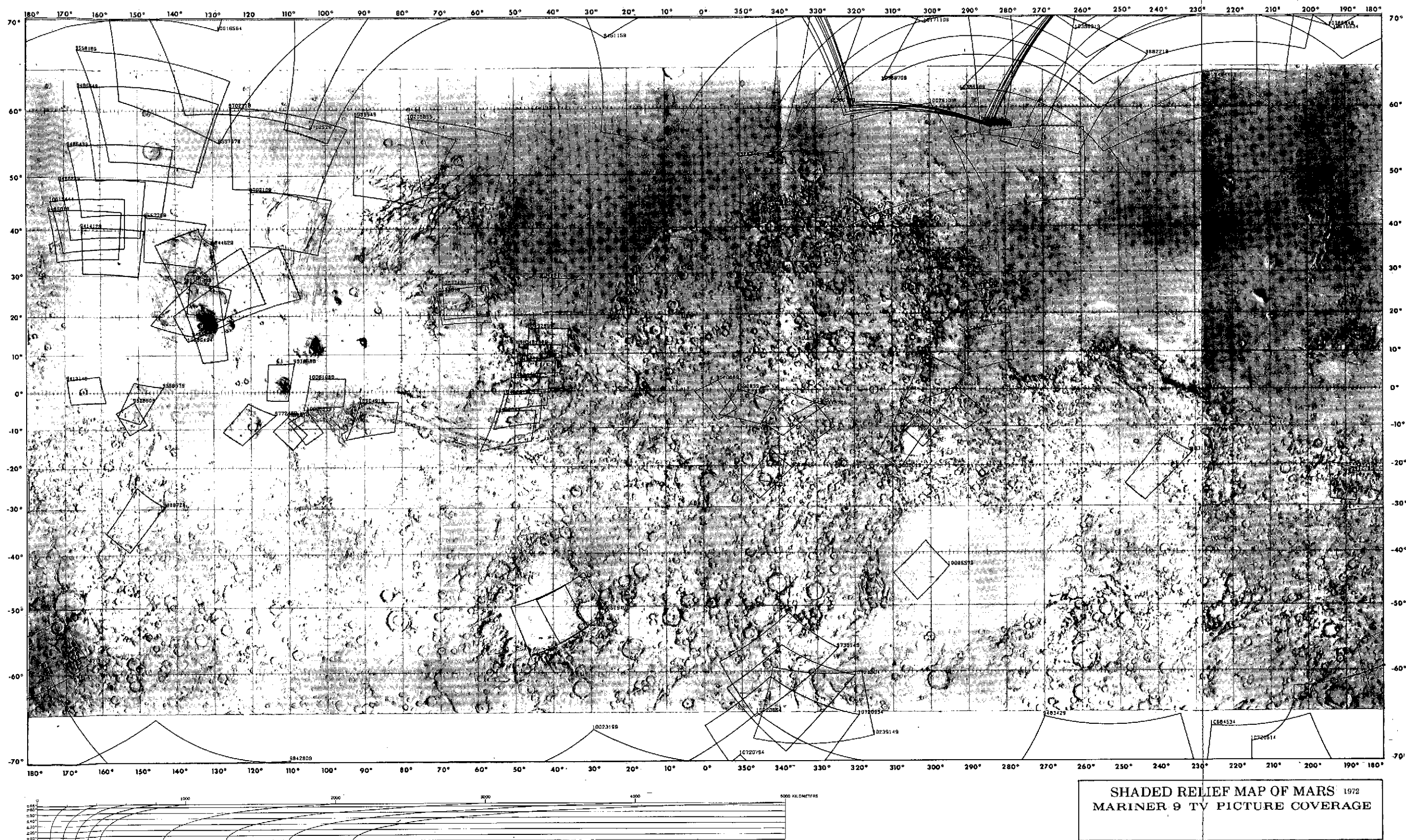
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178	7975623	MC-1
178	7975833	MC-1
179	8008033	MC-20
179	8010043	MC-16
179	8011533	MC-2
179	8011603	MC-2
180	8047513	MC-5
180	8047583	MC-5
181	8077923	MC-30
181	8081953	MC-15
182	8115903	MC-30
182	8119683	MC-5
183	8153913	MC-16
183	8155363	MC-2
183	8155463	MC-2
184	8191369	MC-1
184	8191439	MC-1
184	8191649	MC-1
185	8225879	MC-16
186	8259829	MC-26
186	8263609	MC-1
187	8297839	MC-9
187	8299309	MC-3
187	8299379	MC-3
188	8335369	MC-1
189	8367839	MC-30
189	8369869	MC-17
190	8403819	MC-26
190	8407699	MC-1
191	8439869	MC-30
191	8441899	MC-17
191	8443369	MC-1
191	8443439	MC-1
192	8475849	MC-30
192	8479349	MC-1
192	8479419	MC-1
192	8479629	MC-1
193	8513859	MC-9
194	8547879	MC-26
194	8551659	MC-1
195	8583859	MC-29
195	8585489	MC-9
196	8607359	MC-7
196	8623339	MC-4
197	8657849	MC-9
199	8727849	MC-30
199	8729479	MC-9
200	8763829	MC-30
200	8767329	MC-5
201	8801909	MC-17
203	8873799	MC-10
204	8907679	MC-27
204	8911179	MC-5
205	8945489	MC-10
206	8983419	MC-1
209	9089819	MC-11
210	9123069	MC-27
211	9162829	MC-4
212	9194959	MC-27
212	9198809	MC-7
212	9198879	MC-7
213	9234719	MC-1
214	9266849	MC-28
216	9342569	MC-2



SHADED RELIEF MAP OF MARS 1972
MARINER 9 TV PICTURE COVERAGE

Fig. 7. Mapping Cycle IHI, Non-Mapping and Non-Geodesy, Revs 178-216.

12
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Rev DAS-Time Quad

218	9412799	MC-23
218	9413167	MC-8
218	9414127	MC-2
218	9414407	MC-6
219	9448707	MC-20
219	9450387	MC-5
219	9451157	MC-1
220	9483427	MC-30
220	9484197	MC-23
220	9485037	MC-9
220	9486017	MC-2
220	9486227	MC-2
220	9486437	MC-2
220	9486647	MC-2
221	9519337	MC-24
221	9519407	MC-26
221	9520467	MC-23
221	9522147	MC-5
222	9566577	MC-16
222	9567767	MC-2
222	9567977	MC-1
222	9568187	MC-2
223	9592277	MC-30
223	9592837	MC-20
224	9628607	MC-16
225	9666547	MC-1
225	9666617	MC-1
225	9666687	MC-1
225	9666757	MC-1
225	9666827	MC-1
225	9666897	MC-1
226	9697277	MC-24
226	9701337	MC-9
226	9702107	MC-3
226	9702317	MC-3
226	9702527	MC-1
227	9735147	MC-27
227	9736547	MC-20
228	9771127	MC-24
228	9772457	MC-17
229	9808017	MC-21
230	9842807	MC-30
230	9844627	MC-9
231	9880607	MC-21
231	9882217	MC-1
232	9916587	MC-9
233	9953547	MC-13
233	9953827	MC-6
234	9986617	MC-17
234	9986997	MC-3
235	10023197	MC-30
235	10026137	MC-5
236	10060577	MC-17
236	10061067	MC-17
237	10098377	MC-27
237	10098627	MC-21
237	10098167	MC-6
238	10133517	MC-10
239	10171107	MC-1
240	10209117	MC-18
240	10205877	MC-3
241	10239147	MC-27
242	10277437	MC-10
243	10311877	MC-22
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245	10386847	MC-1
245	10386917	MC-1
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246	10492827	MC-11
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246	10492967	MC-11
246	10493037	MC-11
246	10493107	MC-11
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249	10618587	MC-1
249	10618647	MC-1
249	10618717	MC-1
249	10618787	MC-1
249	10618857	MC-1
249	10618927	MC-1
249	10618997	MC-1
249	10619067	MC-1
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249	10639017	MC-1
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249	10639157	MC-1
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249	10639	

Rev DAS-Time Quad	Rev DAS-Time Quad
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416 11443409 MC-20	528 12994312 MC- 2
416 11445079 MC- 5	528 12994362 MC- 9
416 11445639 MC- 5	529 13021102 MC-11
416 11445779 MC- 5	529 13021682 MC-11
416 11445949 MC- 1	529 13028122 MC- 1
416 11446129 MC- 5	533 13145251 MC-19
417 11480009 MC- 8	533 13145391 MC-20
417 11480779 MC- 8	667 13313905 MC-10
417 11481619 MC- 2	667 13317545 MC- 1
417 11481759 MC- 2	667 13328745 MC-19
417 11481949 MC- 1	668 13350025 MC-14
417 11482109 MC- 3	668 13353315 MC- 1
422 11419965 MC-27	668 13353595 MC- 7
422 11420385 MC-20	668 13354295 MC- 2
422 11420525 MC-20	668 13360365 MC- 2
422 11422915 MC- 9	675 13460048 MC-11
422 11422555 MC- 6	675 13460918 MC- 4
422 11422765 MC- 1	675 13471198 MC-13
422 11422905 MC- 1	676 13496118 MC-15
423 11456295 MC-16	676 13500528 MC- 9
423 11457065 MC- 9	676 13502978 MC- 9
423 11458395 MC- 3	676 13505498 MC- 9
423 11458535 MC- 3	676 13507948 MC- 9
423 11458745 MC- 1	
423 11458805 MC- 1	
430 11796788 MC-27	
430 11796996 MC-27	
430 11797486 MC-21	
430 11798166 MC-13	
430 11799584 MC- 6	
430 11799726 MC- 6	
430 11800006 MC- 6	
430 11800146 MC- 1	
431 11833538 MC-17	
431 11835546 MC- 3	
431 11835706 MC- 3	
431 11835986 MC- 3	
431 11836126 MC- 1	
436 11973784 MC-28	
436 11974064 MC-22	
436 11974904 MC-14	
436 11975324 MC-14	
436 11976584 MC- 7	
436 11976724 MC- 7	
436 11977004 MC- 7	
436 11977144 MC- 1	
437 12010324 MC-18	
437 12012564 MC- 4	
437 12012704 MC- 4	
437 12012964 MC- 4	
437 12013124 MC- 1	
444 12150992 MC-15	
444 12152962 MC- 7	
444 12152402 MC- 7	
444 12152882 MC- 7	
444 12153092 MC- 1	
445 12184042 MC-19	
445 12187042 MC-11	
445 12188372 MC- 4	
445 12188512 MC- 4	
445 12188792 MC- 4	
445 12188932 MC- 1	
450 12326301 MC-23	
450 12326721 MC-15	
450 12327981 MC- 7	
450 12328121 MC- 2	
450 12328901 MC- 2	
451 12361731 MC-19	
451 12362911 MC- 1	
451 12363891 MC- 5	
451 12364031 MC- 5	
451 12364311 MC- 5	
451 12364451 MC- 1	
456 12502270 MC- 1	
459 12535030 MC-30	
459 12535100 MC-30	
459 12535190 MC-27	
459 12535240 MC-27	
459 12535590 MC-20	
459 12538250 MC- 1	
473 12685638 MC-21	
473 12686058 MC-14	
473 12686408 MC-14	
478 12864028 MC-10	
478 12874498 MC-12	
478 12874568 MC- 1	
479 12901398 MC-22	
479 12902148 MC-14	
479 12909988 MC- 2	
479 12910058 MC- 7	
528 12985632 MC-23	
528 12985642 MC-15	

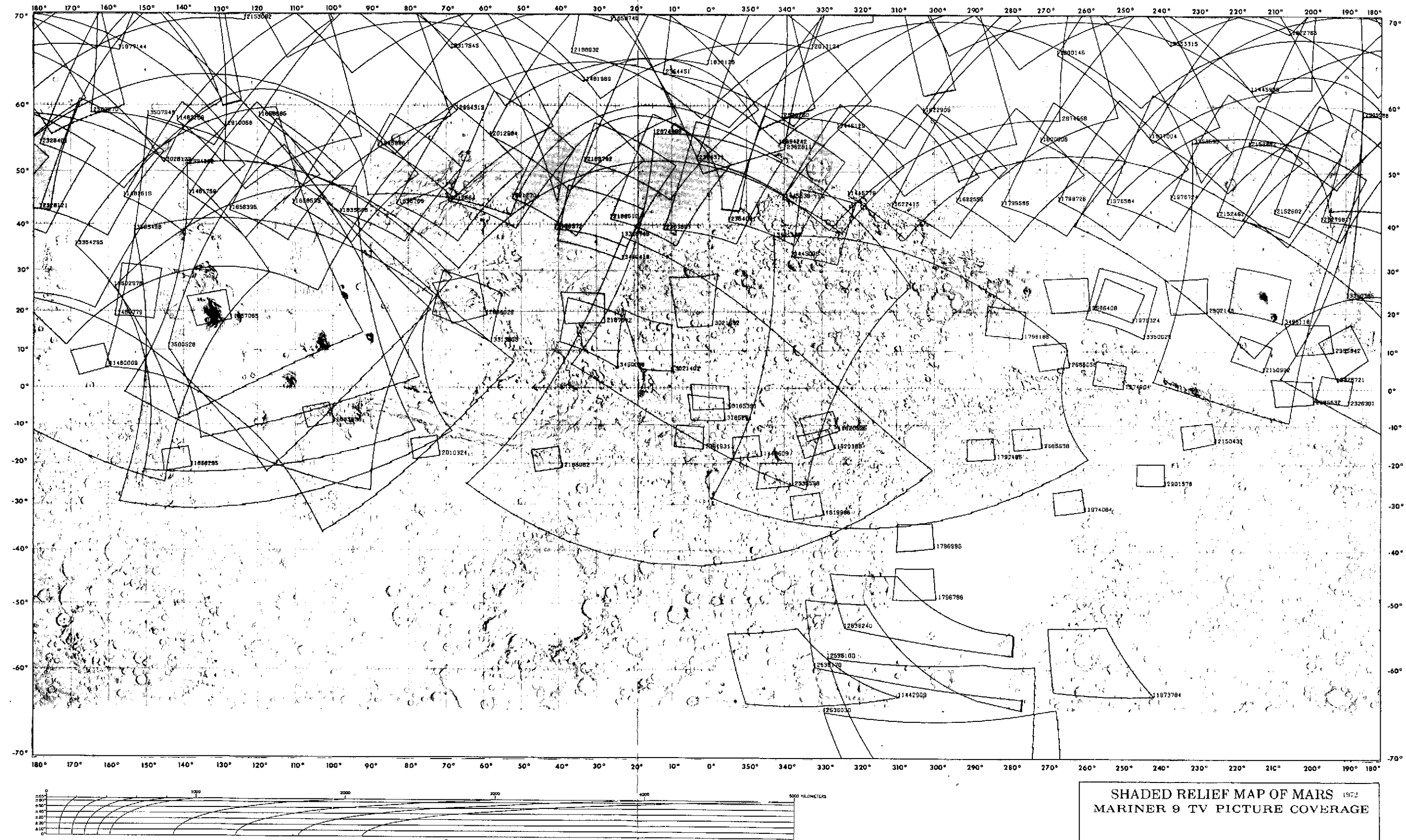
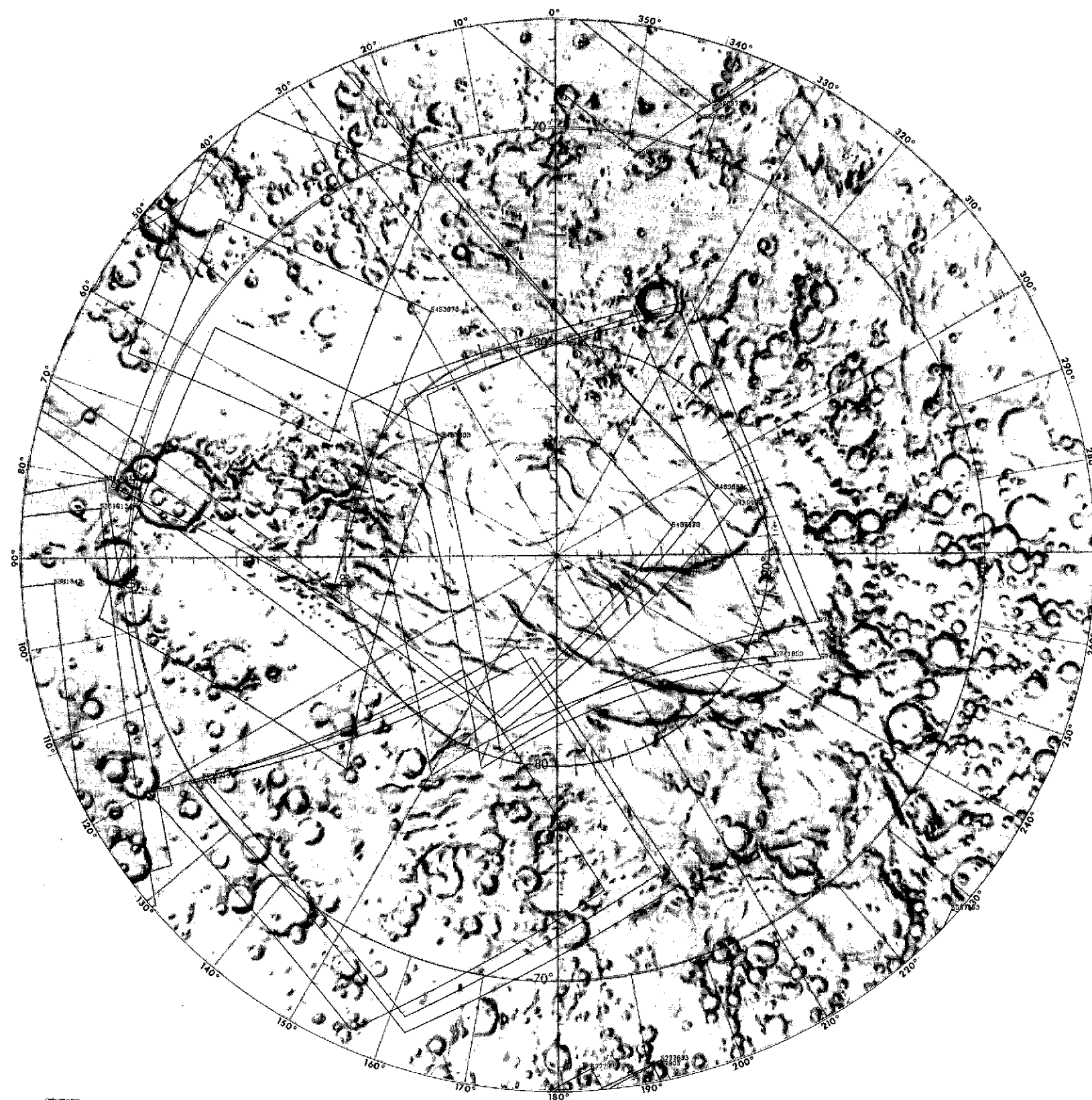


Fig. 9. Extended Mission, Phase II, Revs 416-676.

III. Polar Stereographic Projections of the South Pole: Wide-Angle Camera Coverage



SOUTH POLAR REGION		
MAP CYCLE 1A REVS 100-118 NON-GLOBAL A CAMERA		
REV	DAS	TIME
106	5381843	
106	5381913	
106	5381983	
108	5453803	
108	5453873	
108	5453943	
109	5489783	
109	5489853	
109	5489923	
110	5525833	
110	5525903	
110	5525973	
111	5561953	
113	5633843	
113	5633913	
113	5633983	
116	5741853	
116	5741923	
116	5741993	
117	5777833	
117	5777903	
117	5777973	

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ORIGINAL PAGE IS POOR

Fig. 10. Mapping Cycle 1A, Non-Global, Revs 100-118.

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SOUTH POLAR REGION	
MAP CYCLE 1A REVS 100-118 GLOBAL A CAMERA	
REV	DAS TIME
100	5164703
100	5164773
101	5200683
101	5200753
102	5236803
103	5272643
105	5344603
106	5380513
107	5416493
108	5452473
108	5452543
109	5488453
109	5488523
110	5524503
110	5524573
111	5560483
111	5560553
112	5596463
112	5596533
113	5632513
113	5632583
114	5668493
114	5668563
115	5704473
115	5704543
116	5740523
116	5740593
117	5776503
117	5776573
118	5812483
118	5812553

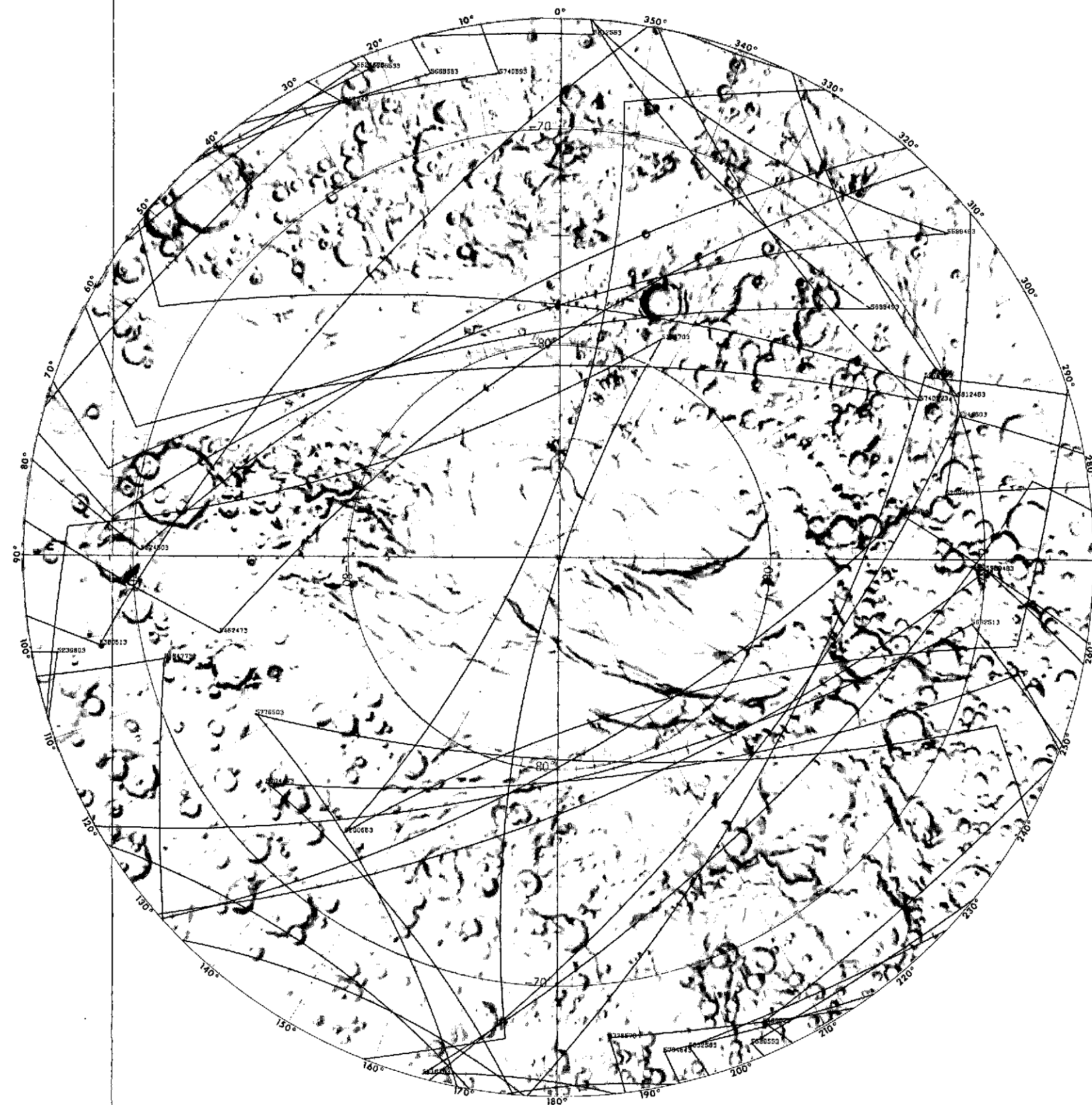
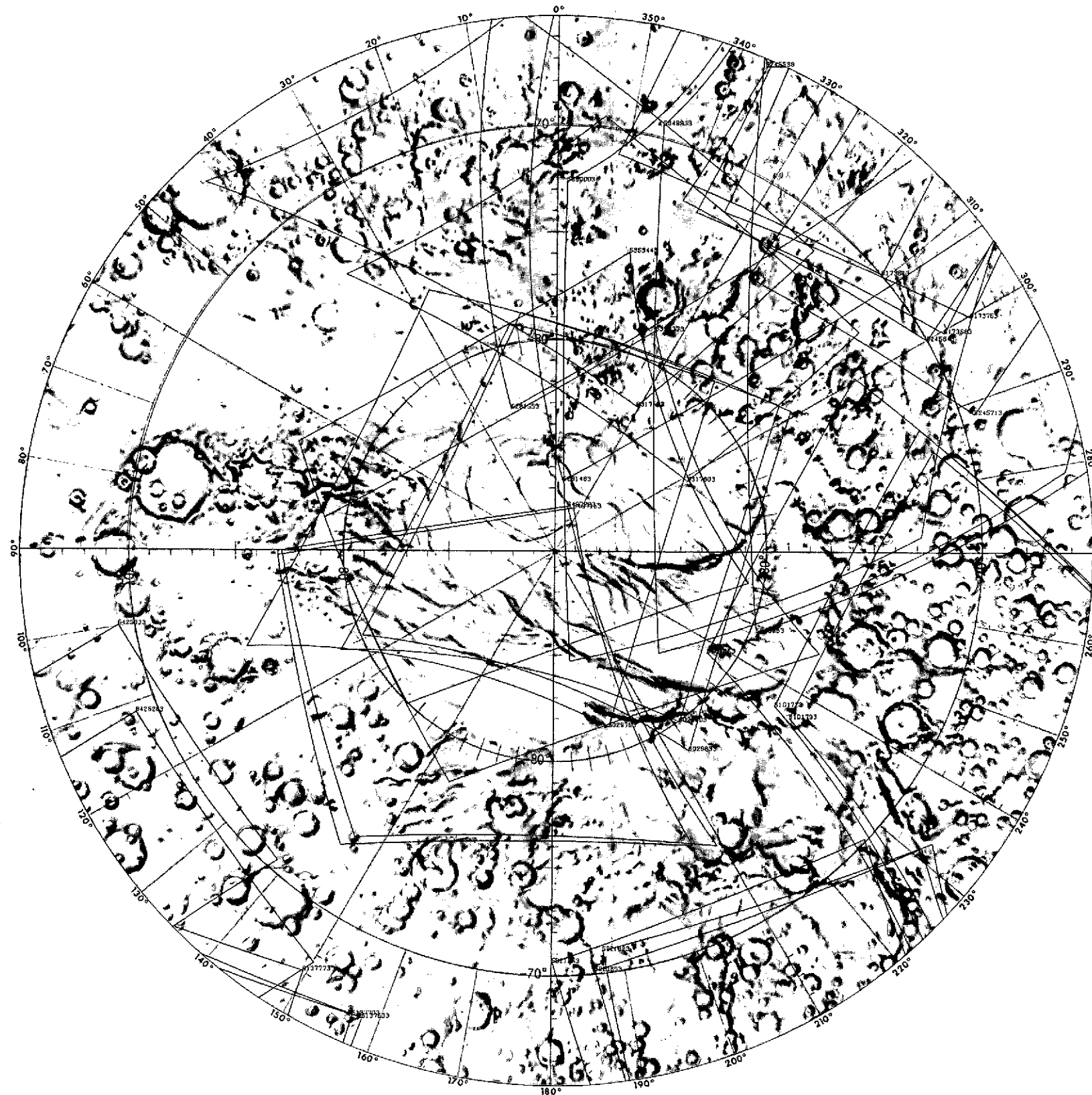


Fig. 11. Mapping Cycle 1A, Global, Revs 100-118.

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SOUTH POLAR REGION

MAP CYCLE 1B
REVS 119-138
NON-GLOBAL
A CAMERA

REV	DAS	TIME
119	58498	63
119	58499	33
119	58500	03
121	59218	23
121	59218	93
121	59219	63
124	60297	63
124	60298	33
124	60299	03
126	61016	53
126	61017	23
126	61017	93
127	61376	33
127	61377	03
127	61377	73
128	61736	13
128	61736	83
128	61737	53
130	62455	38
130	62456	43
130	62457	13
131	62814	83
131	62815	53
132	63175	33
132	63176	03
133	63533	73
133	63534	43
135	64252	63
135	64253	33
137	64971	53
137	64972	23

ROLDOUT FRAMES

Fig. 12. Mapping Cycle IB, Non-Global, Revs 119-138.

ROLDOUT FRAMES

SOUTH POLAR REGION		
MAP CYCLE 1B REVS 119-138 GLOBAL A CAMERA		
REV	DAS TIME	
119	5848533	
119	5848603	
120	5884513	
120	5884583	
121	5920493	
121	5920563	
122	5956473	
122	5956543	
123	5992453	
123	5992523	
126	6100323	
126	6100393	
127	6136303	
127	6136373	
128	6172283	
128	6172353	
129	6208193	
129	6208263	
130	6244173	
130	6244243	
131	6280083	
131	6280153	
132	6316063	
132	6316133	
133	6351973	
133	6352043	
134	6388793	
134	6388863	
135	6423863	
135	6423933	
136	6459843	
136	6459913	
137	6495753	
137	6495823	
138	6531733	
138	6531803	

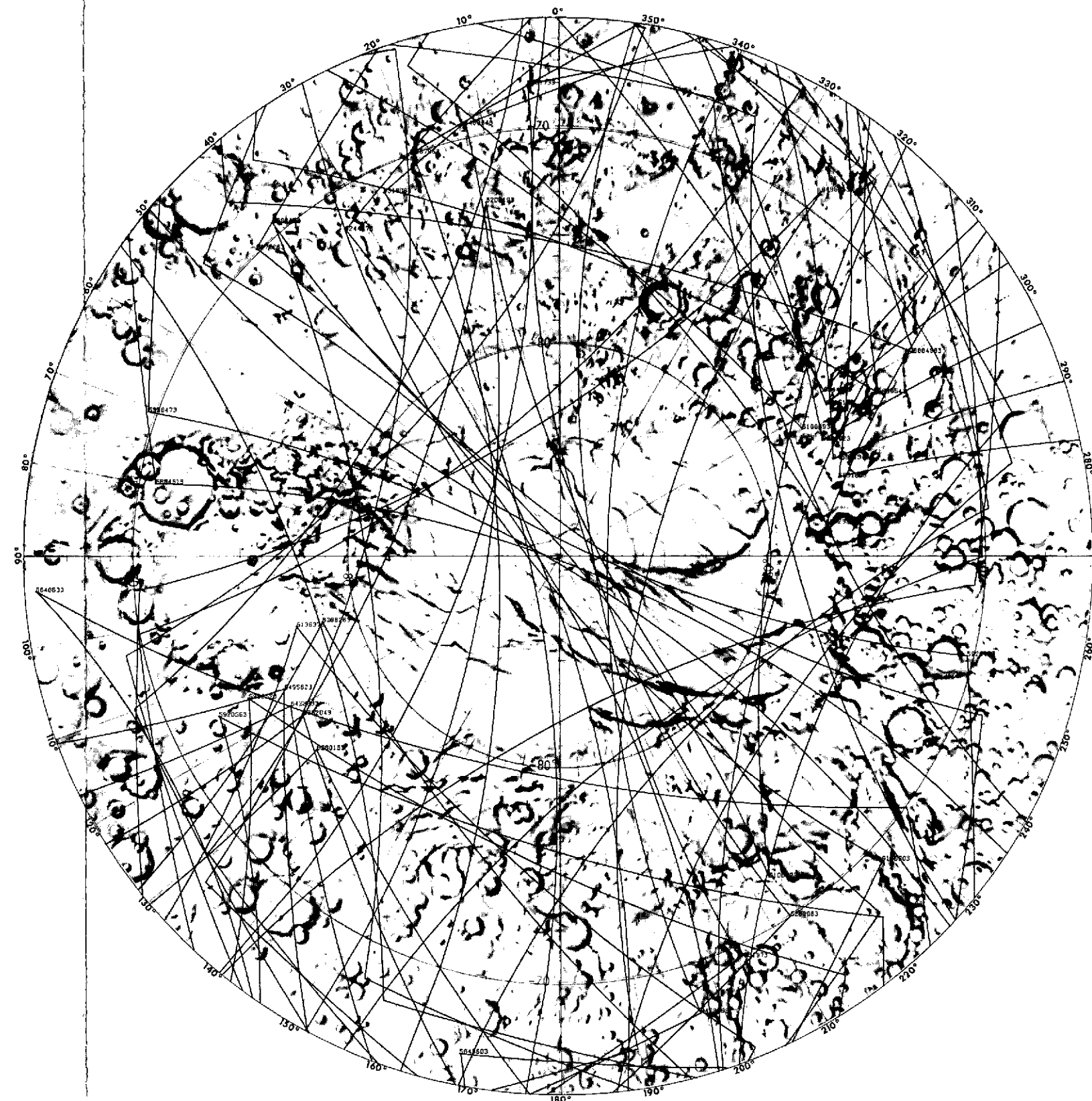
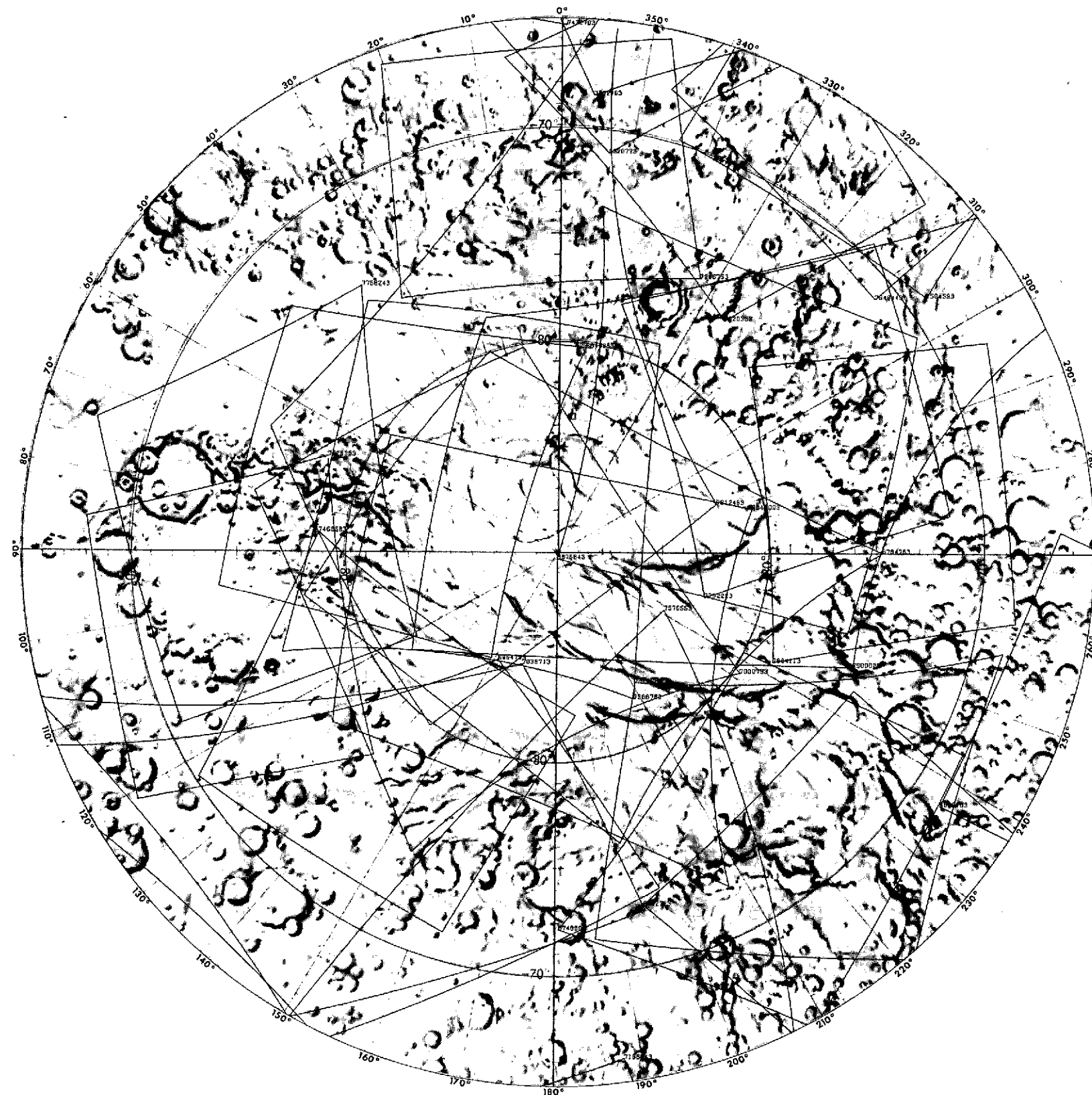


Fig. 13. Mapping Cycle 1B, Global, Revs 119-138.



SOUTH POLAR REGION

MAP CYCLE 2
REVS 139-177
A CAMERA

REV	DAS TIME
141	6640933
141	6641003
142	6676843
144	6748803
145	6784783
146	6820763
148	6892723
149	6928773
150	6964753
151	7000733
152	7036713
153	7072763
154	7108743
157	7216753
159	7288783
160	7324763
163	7432703
164	7468683
165	7504593
167	7576553
168	7612463
169	7648443
171	7720333
172	7756243
173	7792223
174	7828133
175	7864113
176	7900023

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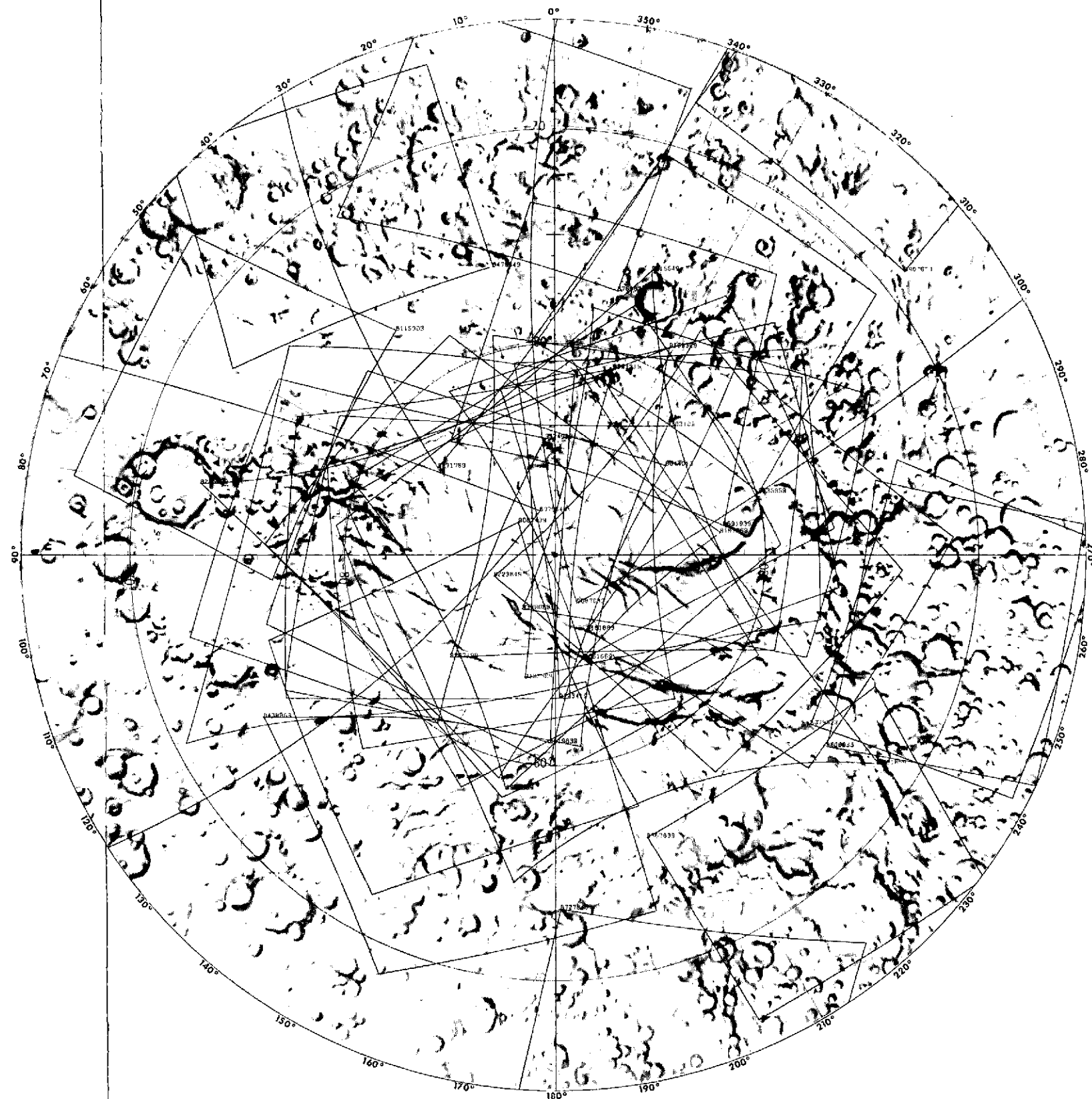
Fig. 14. Mapping Cycle II, Revs 139-177.

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SOUTH POLAR REGION

MAP CYCLE 3
REVS 178-217
A CAMERA

REV	DAS TIME
179	8008033
180	8044013
181	8079643
181	8079923
182	8115903
183	8151883
184	8187869
185	8223849
187	8295809
188	8331859
189	8367839
191	8439869
192	8475849
196	8619839
198	8691939
199	8727849
200	8763829
202	8835859
203	8871769
204	8907679
206	8979639
207	9015549
208	9051669
209	9087089
209	9087439
210	9123419
211	9159329
212	9195309
213	9231219
214	9267199
215	9303109
216	9339089
217	9374999

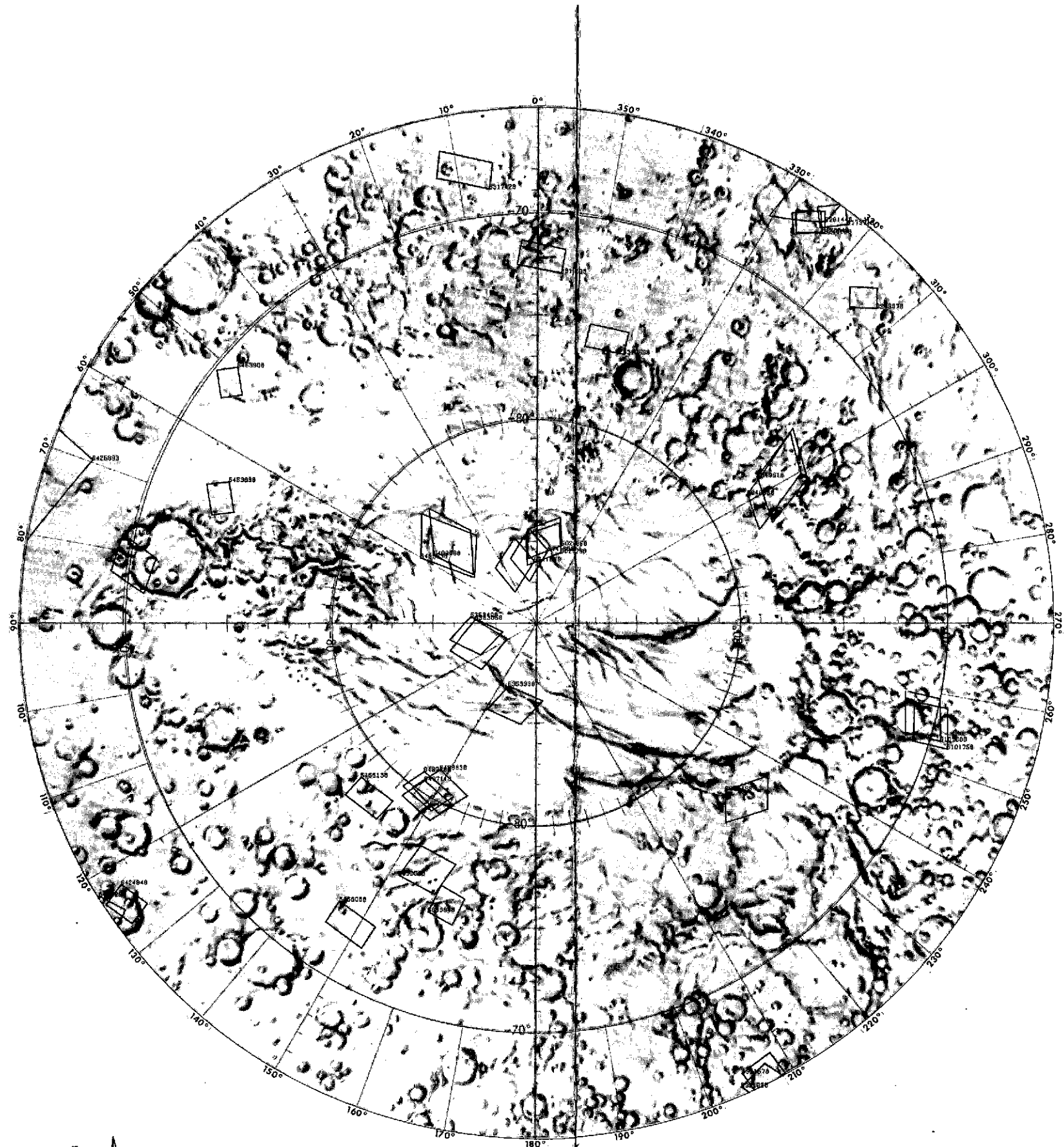


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Fig. 15. Mapping Cycle III, Revs 178-217.

IV. Polar Stereographic Projections of the South Pole: Narrow-Angle Camera Coverage

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SOUTH POLAR REGION

MAP CYCLE 1
REVS 100-138
B CAMERA

REV	DAS TIME
100	5166068
100	5166138
108	5453838
108	5453908
109	5489538
109	5489888
113	5633598
113	5633948
116	5741888
116	5741958
119	5849618
119	5849968
121	5921578
121	5921928
124	6029798
124	6029868
125	6065498
126	6101688
126	6101758
128	6173648
128	6173718
130	6245608
130	6245678
131	6281168
131	6281448
132	6317428
132	6317498
132	6317568
133	6353058
133	6353338
133	6353408
135	6424948
135	6425298
135	6425893
137	6496838
137	6497118
137	6497188

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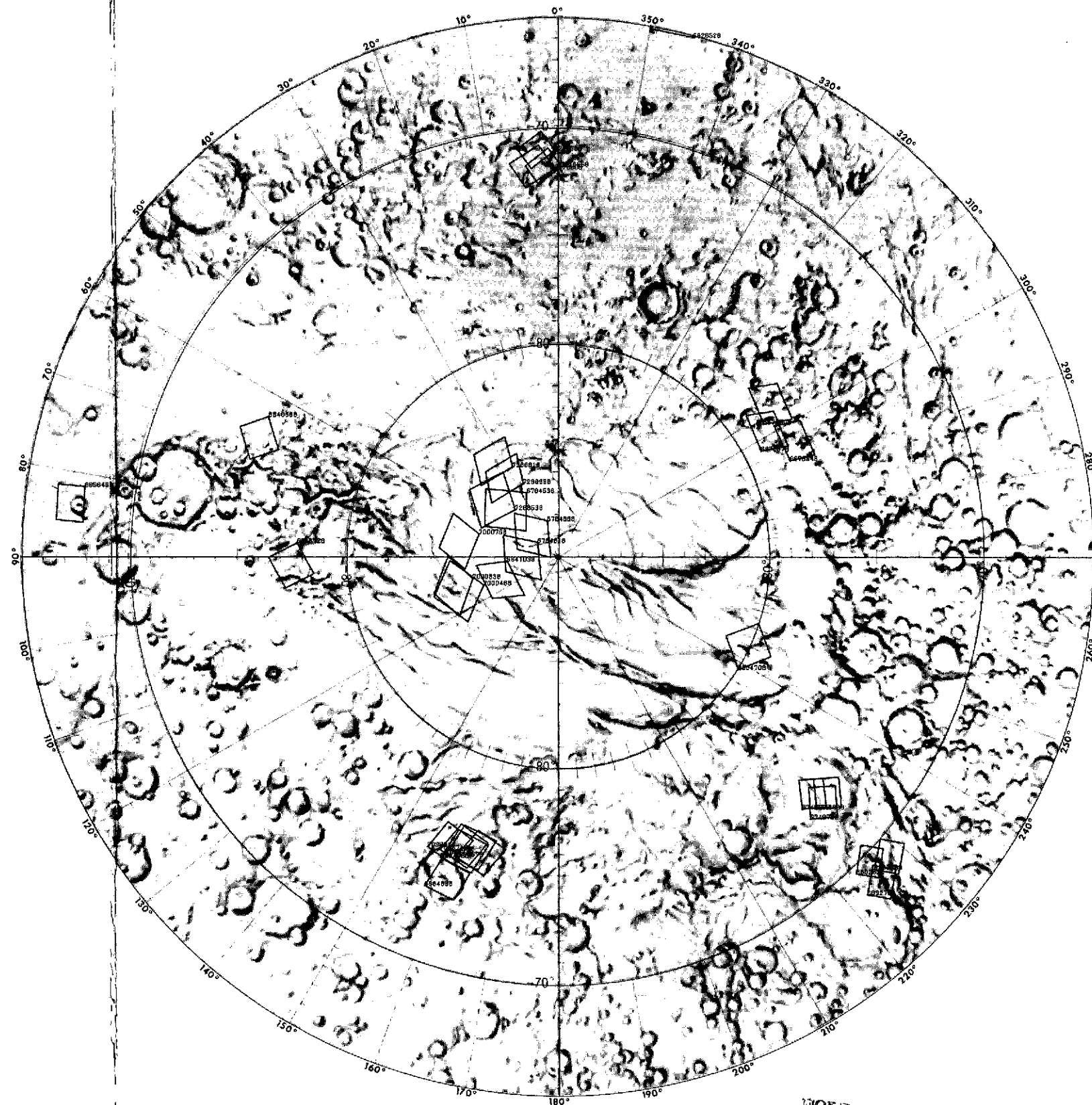
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SOUTH POLAR REGION

MAP CYCLE 2A
REVS 139-159
B CAMERA

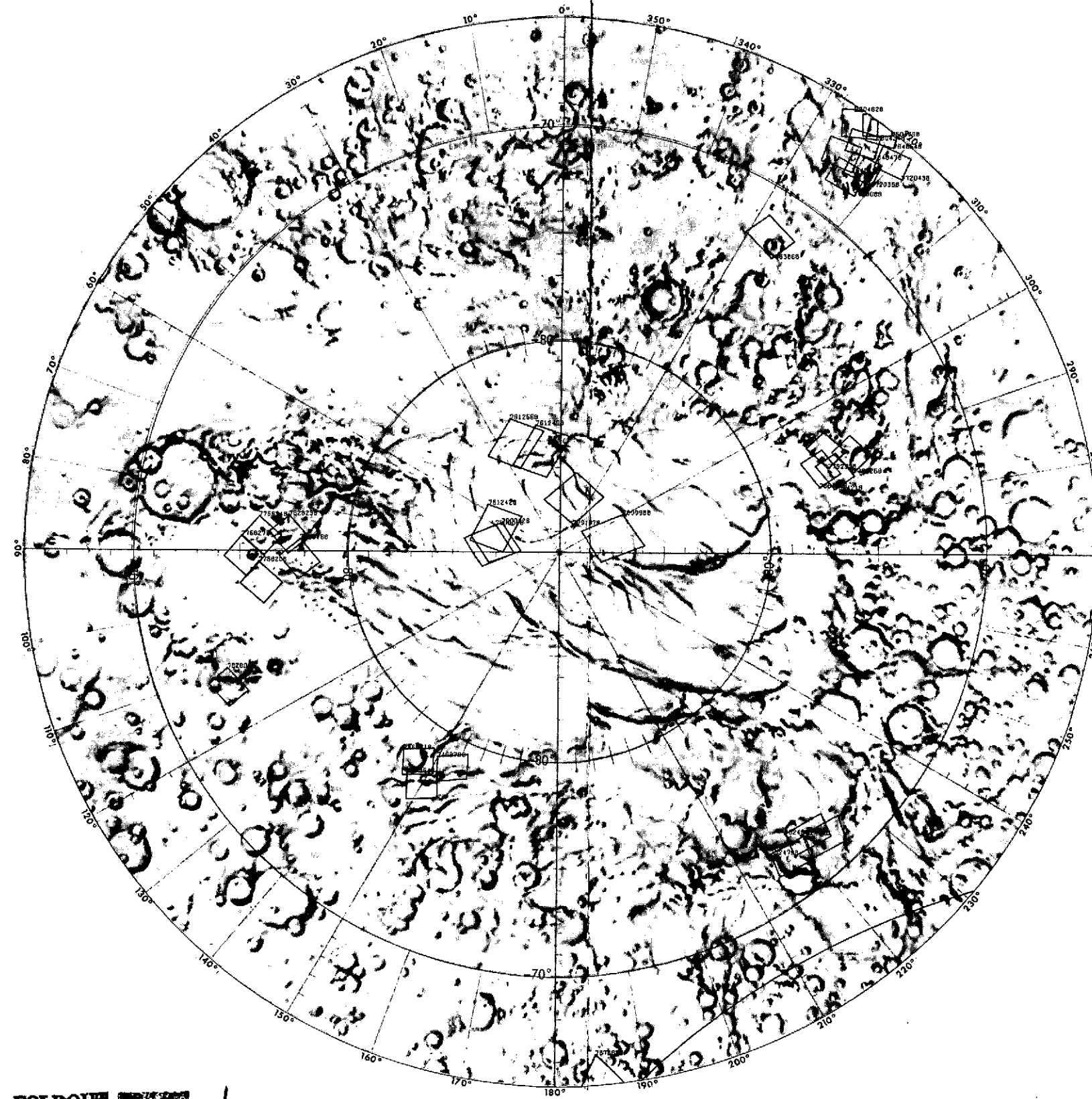
REV	DAS TIME
139	6568728
140	6604708
141	6640688
141	6641038
142	6676808
142	6676878
142	6676948
144	6748768
144	6748838
144	6748908
145	6784538
145	6784818
145	6784888
147	6856498
148	6892688
148	6892758
148	6892828
149	6928528
150	6964718
150	6964788
150	6964858
151	7000488
151	7000768
151	7000838
152	7036678
152	7036748
152	7036818
157	7216508
157	7216788
157	7216858
159	7288538
159	7288818
159	7288888



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Fig. 18. Mapping Cycle IIA, Revs 139-159.

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SOUTH POLAR REGION

MAP CYCLE 2B
REVS 160-177
B CAMERA

REV	DAS TIME
160	7324728
160	7324798
160	7324868
164	7468648
164	7468718
164	7468788
165	7504348
165	7504628
165	7504698
167	7576658
168	7612428
168	7612498
168	7612568
169	7648198
169	7648478
169	7648548
171	7720088
171	7720368
171	7720438
172	7756208
172	7756278
172	7756348
173	7791978
173	7792258
173	7792328
174	7828098
174	7828168
174	7828238
175	7863868
175	7864148
175	7864218
176	7899988
176	7900058
176	7900128

Fig. 19. Mapping Cycle IIB, Revs 160-177.

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SOUTH POLAR REGION

MAP CYCLE 3A
REVS 178-188
B CAMERA

REV	DAS TIME
179	8007928
179	8007998
179	8008068
180	8043908
180	8043978
180	8044048
180	8044328
180	8044398
181	8079818
181	8079888
181	8079958
181	8080238
181	8080308
182	8115798
182	8115868
182	8115938
182	8116218
182	8116288
183	8151778
183	8151848
183	8151918
183	8152198
183	8152268
184	8187764
184	8187834
184	8187904
184	8188184
184	8188254
185	8223744
185	8223814
185	8223884
185	8224164
185	8224234
187	8295704
187	8295774
187	8295844
187	8296124
187	8296194
188	83331754
188	83331824
188	83331894
188	83332174
188	83332244

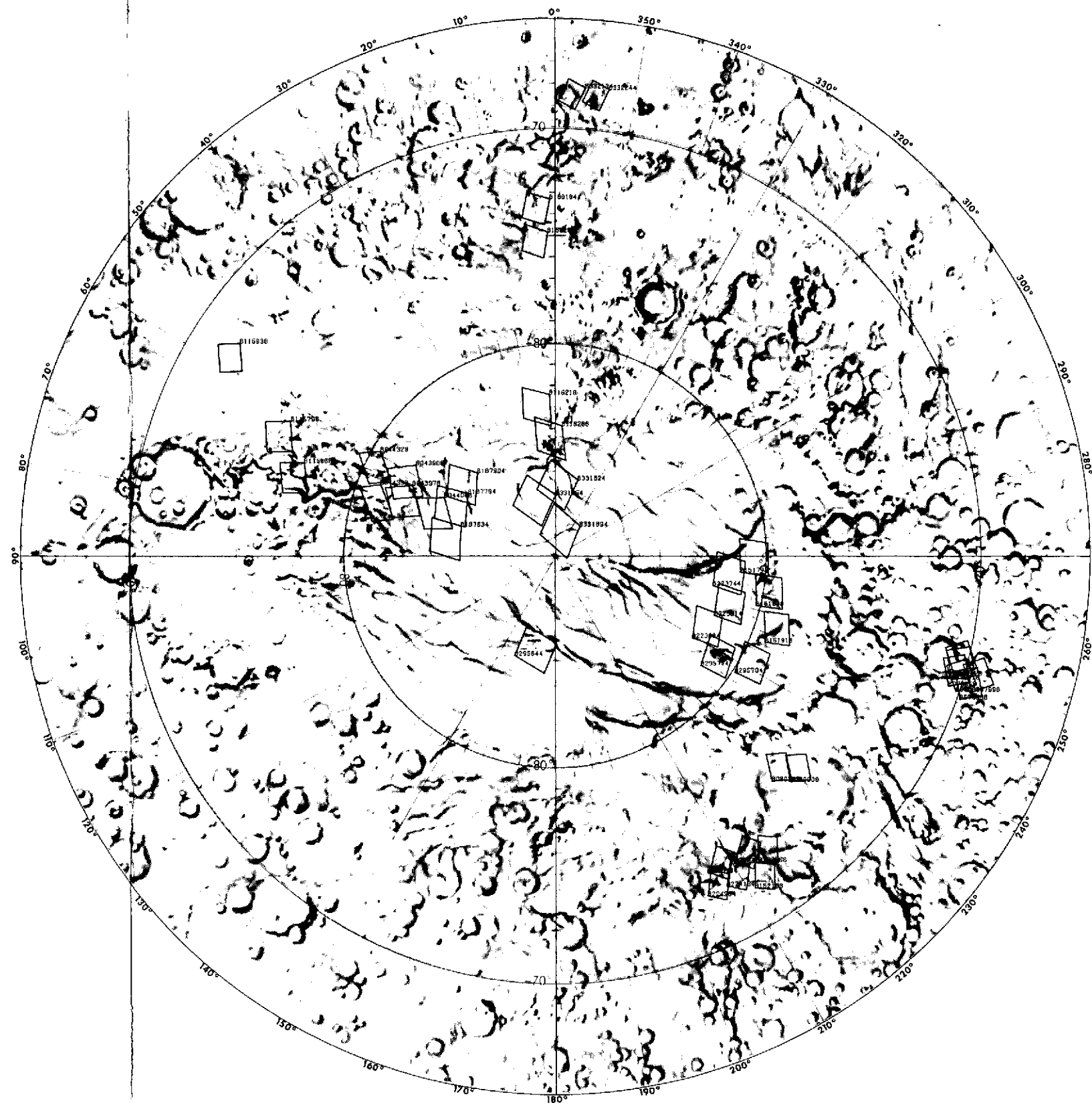
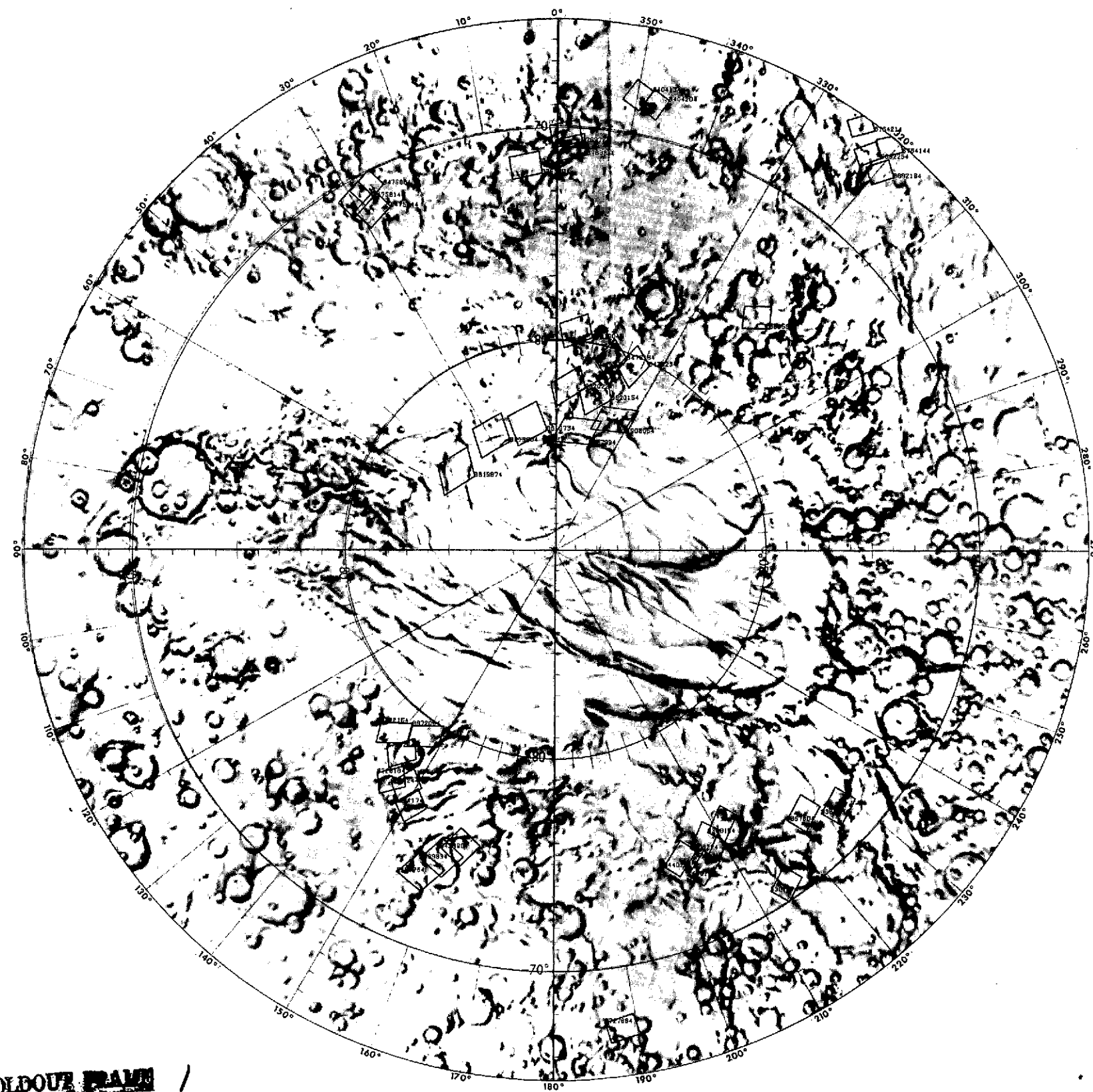


Fig. 20. Mapping Cycle IIIA, Revs 178-188.

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SOUTH POLAR REGION

MAP CYCLE 3B
REVS 189-204
B CAMERA

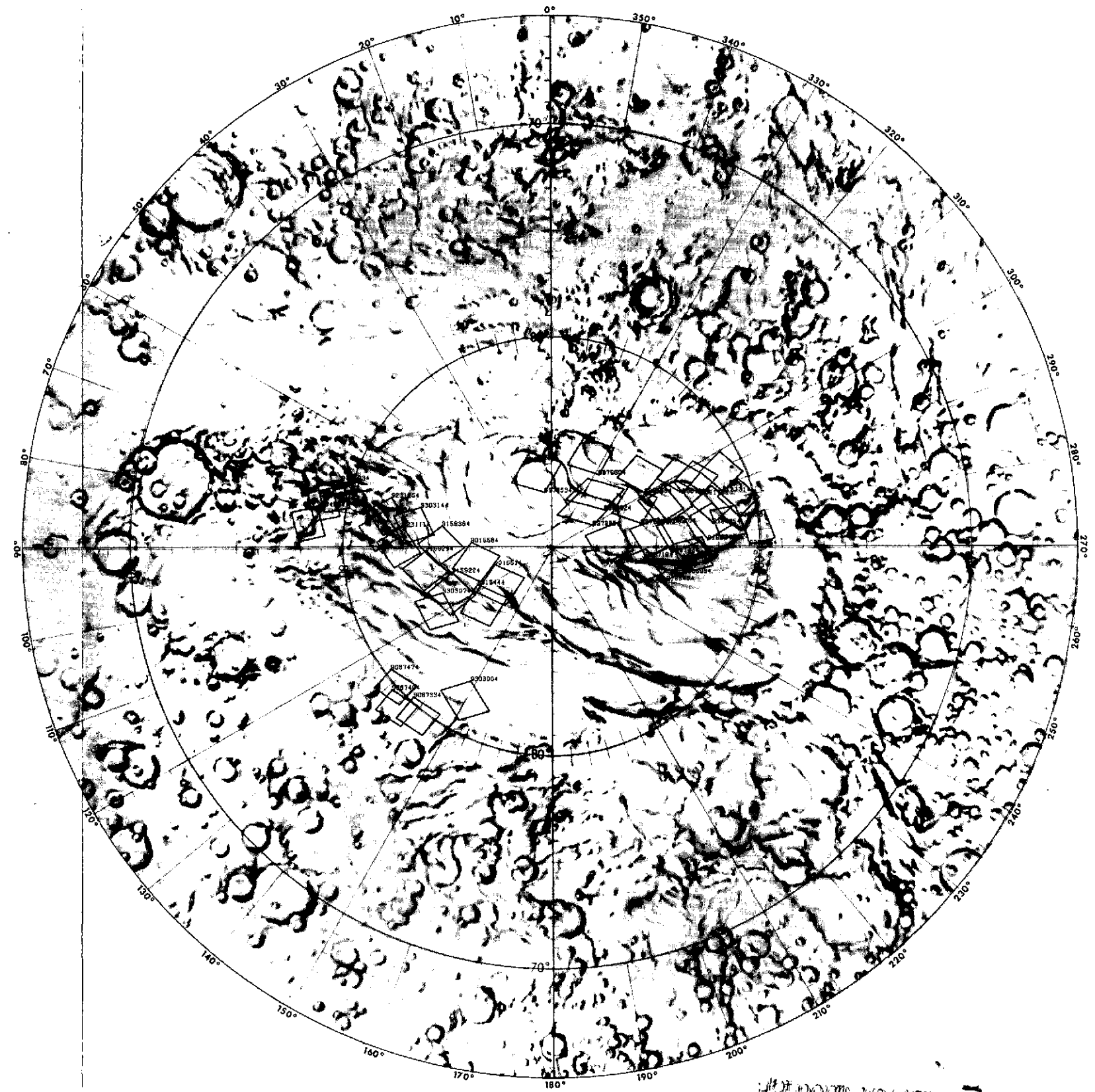
REV	DAS TIME
189	8367734
189	8367804
189	8367874
189	8368154
189	8368224
190	8404134
190	8404204
191	8439764
191	8439834
191	8439904
191	8440184
191	8440254
192	8475744
192	8475814
192	8475884
192	8476164
192	8476234
195	8584174
195	8584244
196	8619734
196	8619804
196	8619874
196	8620154
196	8620224
198	8691904
198	8692184
198	8692254
199	8727884
199	8728164
199	8728234
200	8763724
200	8763794
200	8763864
200	8764144
200	8764214
202	8835894
203	8872084
203	8872154
204	8907994
204	8908064

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Fig. 21. Mapping Cycle IIIB, Revs 189-204.

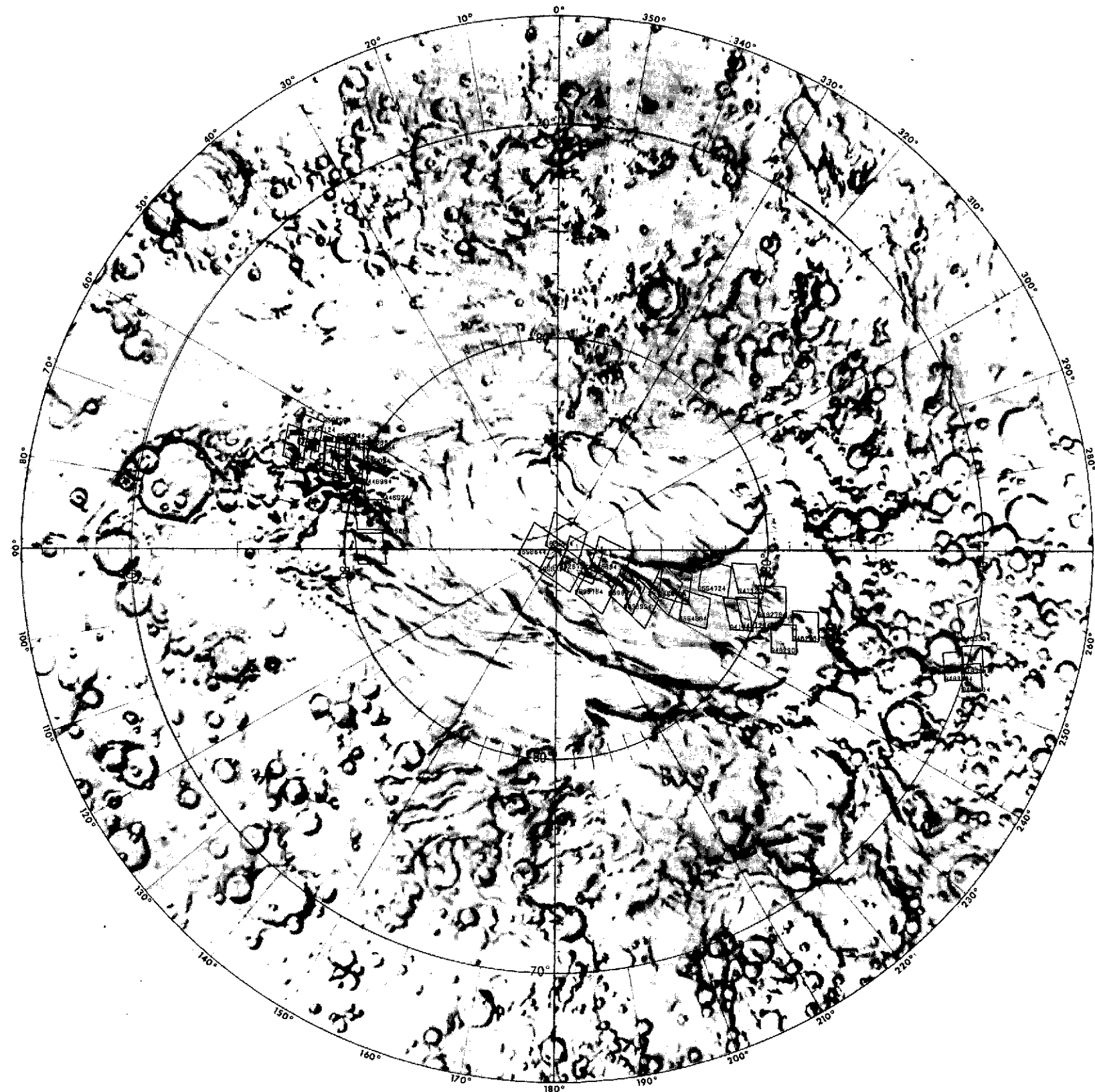
SOUTH POLAR REGION		
MAP CYCLE 3C REVS 205-217 B CAMERA		
REV	DAS TIME	
206	8979534	
206	8979604	
206	8979674	
206	8979954	
206	8980024	
207	9015444	
207	9015514	
207	9015584	
208	9051564	
208	9051634	
208	9051704	
209	9087334	
209	9087404	
209	9087474	
210	9123314	
210	9123384	
210	9123454	
211	9159224	
211	9159294	
211	9159364	
212	9195204	
212	9195274	
212	9195344	
212	9195484	
212	9195554	
213	9231114	
213	9231184	
213	9231254	
214	9267094	
214	9267164	
214	9267234	
215	9303004	
215	9303074	
215	9303144	
216	9338984	
216	9339054	
216	9339124	
217	9374894	
217	9374964	
217	9375034	

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Fig. 22. Mapping Cycle IIIC, Revs 205-217.



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SOUTH POLAR REGION

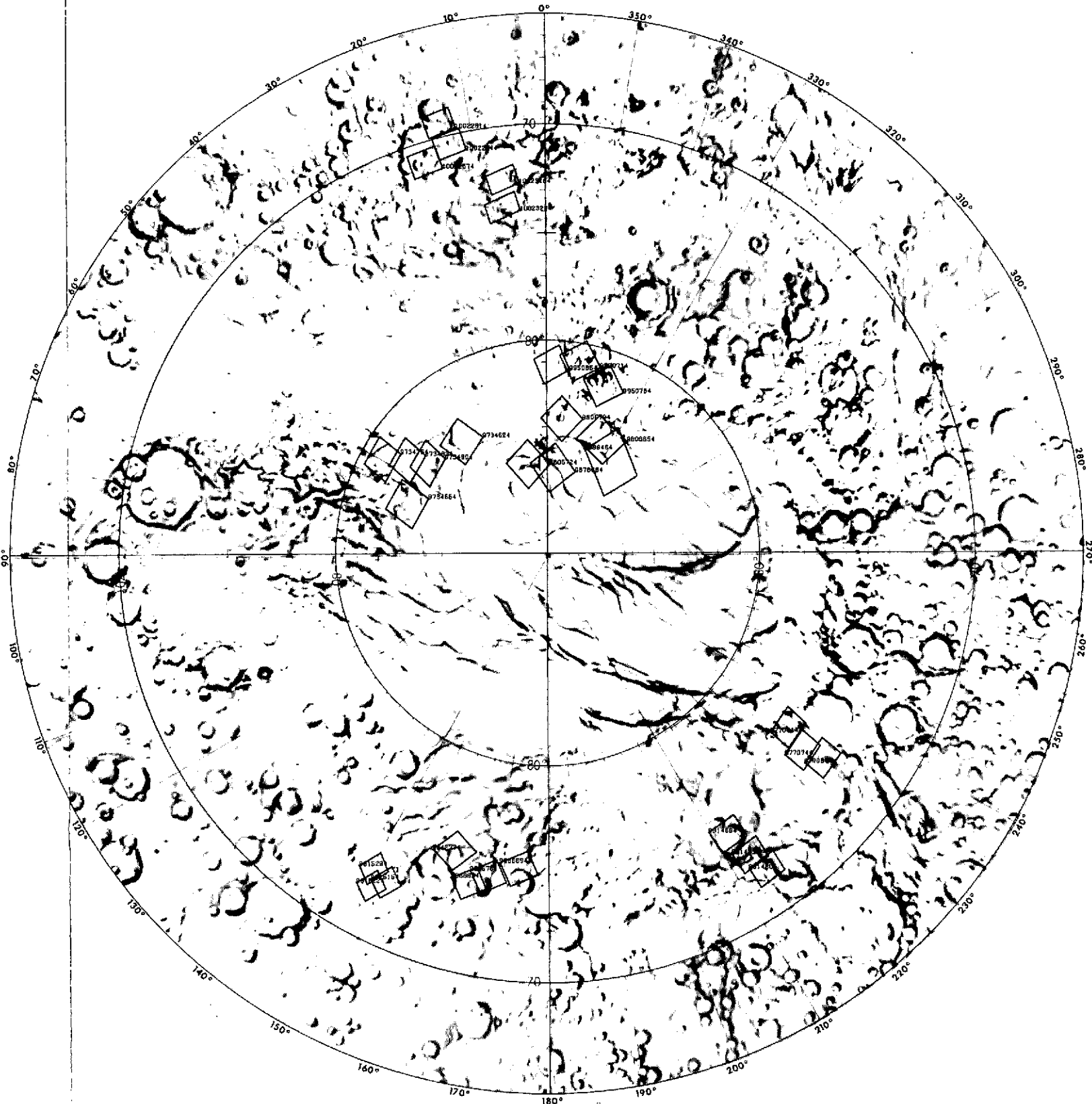
EXTENDED MISSION
PHASE 1A
REVS 218-226
B CAMERA

REV	DAS TIME
218	9411224
218	9411294
218	9411364
219	9446854
219	9446924
219	9446994
220	9482764
220	9482834
220	9482904
220	9483044
220	9483114
220	9483184
220	9483394
221	9518744
221	9518814
221	9518884
221	9519024
221	9519094
221	9519164
222	9554724
222	9554794
222	9554864
223	9590984
223	9591054
223	9591124
224	9626684
224	9626754
224	9626824
226	9698644
226	9698714
226	9698784
226	9698854
226	9698924
226	9698994
226	9699064

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Fig. 23. Extended Mission, Phase 1A, Revs 218-226.

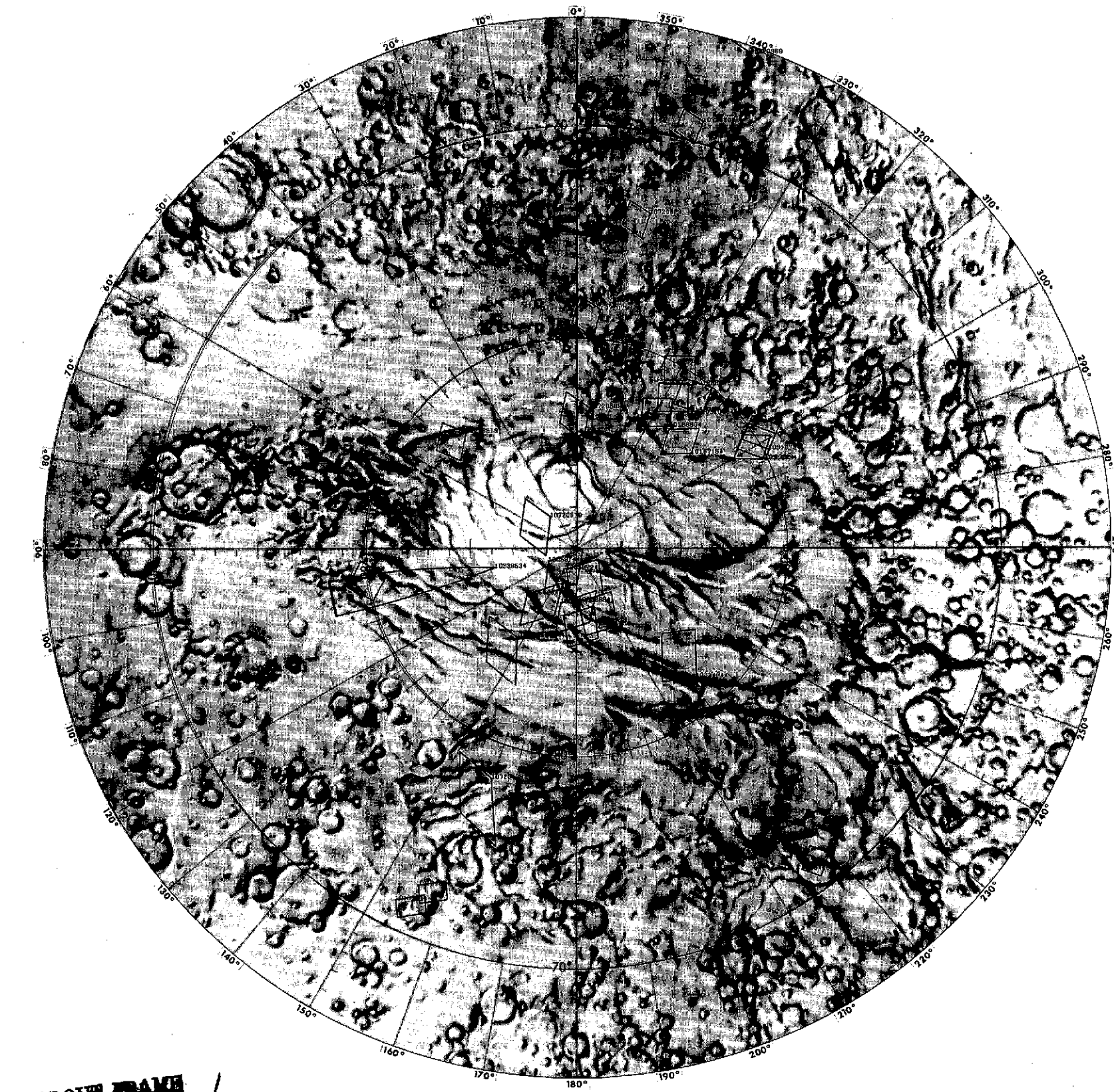
SOUTH POLAR REGION	
EXTENDED MISSION PHASE 1B REVS 227-235 B CAMERA	
REV	DAS TIME
227	9734554
227	9734624
227	9734764
227	9734834
227	9734904
228	9770674
228	9770744
228	9770814
229	9806654
229	9806724
229	9806794
230	9842774
231	9878684
232	9914664
232	9914734
232	9914804
232	9915154
232	9915224
232	9915294
233	9950714
233	9950784
233	9950854
234	9986484
234	9986694
234	9986764
234	9986834
235	10022674
235	10022744
235	10022814
235	10023164
235	10023234



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Fig. 24. Extended Mission, Phase 1B, Revs 227-235.



SOUTH POLAR REGION

EXTENDED MISSION
PHASE 1C
REVS 236-262
B CAMERA

REV	DAS TIME
236	10058654
236	10058724
236	10058794
236	10059144
236	10059214
236	10059284
237	10094844
238	10131244
238	10131314
239	10166664
239	10166734
239	10166804
239	10167154
239	10167224
241	10239534
243	10310584
243	10310654
243	10310724
244	10346634
260	10648519
261	10684499
262	10720479
262	10720549
262	10720619
262	10720689
262	10720759
262	10720829
262	10720899
262	10720969

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Fig. 25. Extended Mission Phase 1C, Revs 236-262.

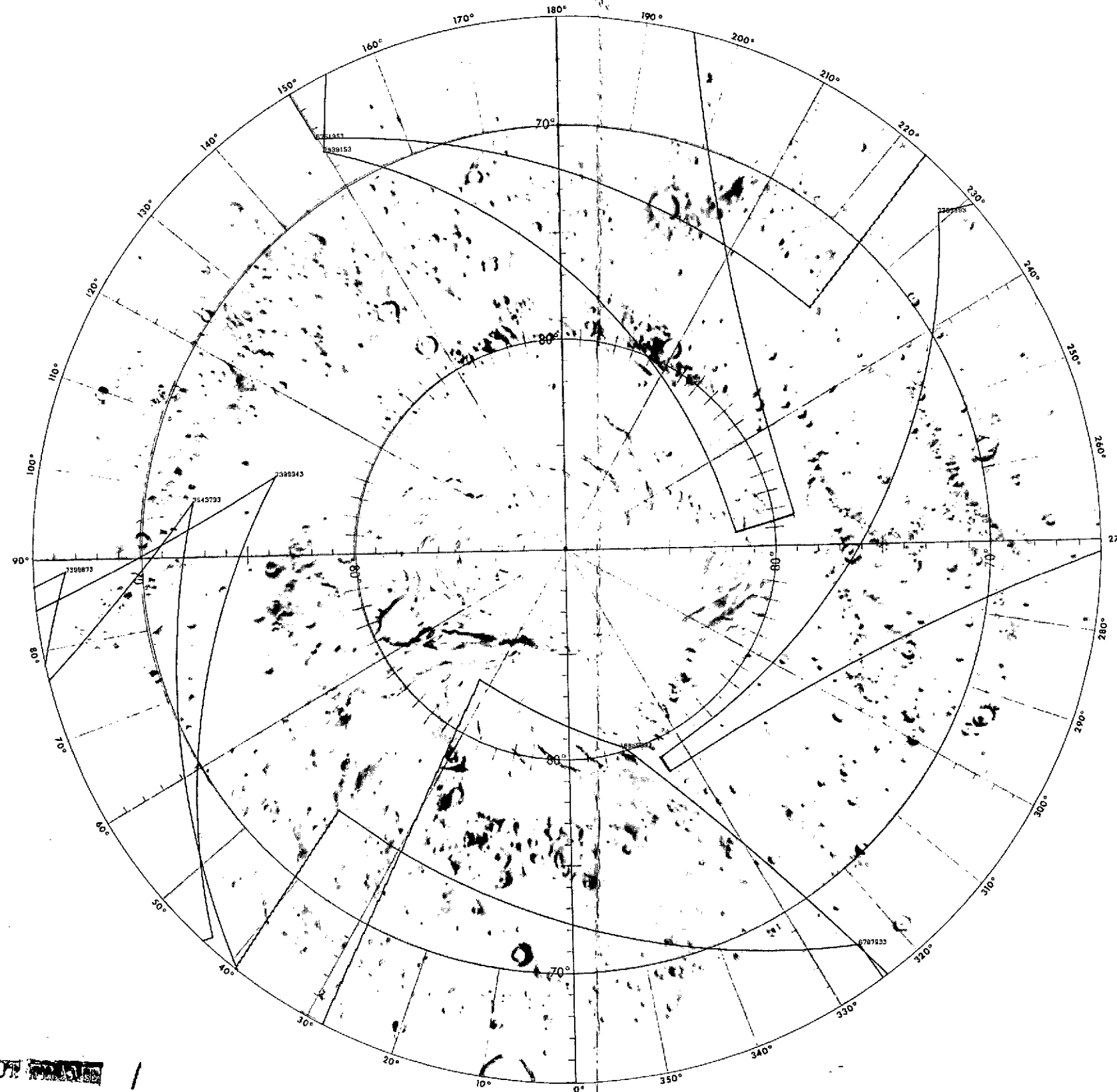
V. Polar Stereographic Projections of the North Pole: Wide-Angle Camera Coverage

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NORTH POLAR
REGION

MAP CYCLE 2
REVS 139-177
A CAMERA

REV	DAS TIME
144	6751953
145	6787933
147	6859893
161	7363893
162	7399873
162	7399943
166	7543793
177	7939153



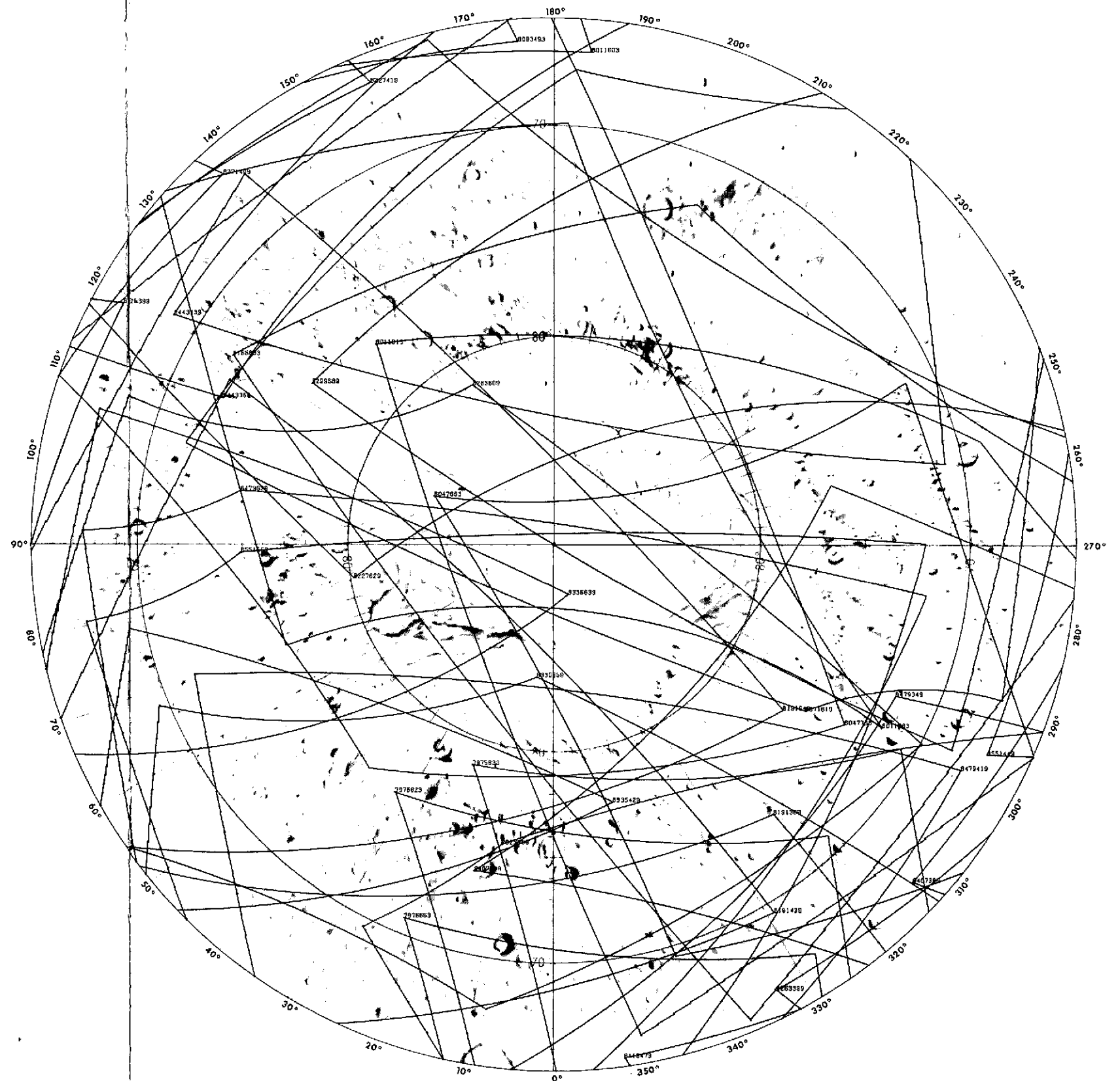
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Fig. 26. Mapping Cycle II, Revs 139-177.

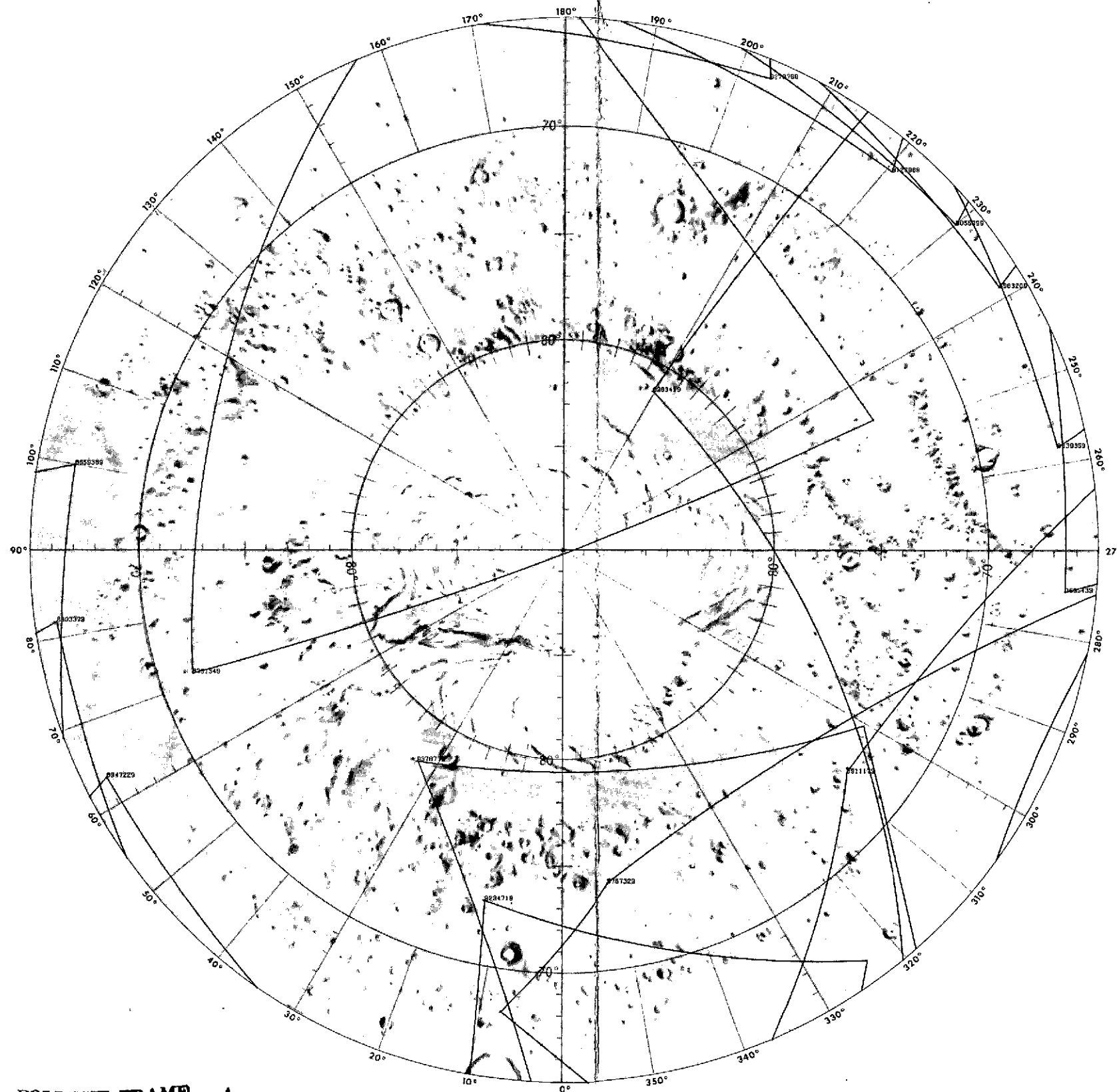
NORTH POLAR REGION	
MAP CYCLE 3A REVS 178-196 A CAMERA	
REV	DAS TIME
178	7975553
178	7975623
178	7975833
179	8011603
179	8011813
179	8011883
180	8047793
180	8047863
181	8083493
182	8119473
183	8155663
184	8191369
184	8191439
184	8191649
185	8227419
185	8227629
186	8263399
186	8263609
187	8299589
188	8335359
188	8335429
188	8335639
189	8371409
189	8371619
190	8407389
190	8407599
191	8443369
191	8443439
192	8479349
192	8479419
192	8479629
193	8515399
194	8551449
194	8551659
196	8623339



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Fig. 27. Mapping Cycle IIIA, Revs 178-196.

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NORTH POLAR REGION

MAP CYCLE 3B
REVS 197-217
A CAMERA

REV	DAS TIME
197	8659389
198	8695439
199	8731349
200	8767329
201	8803379
202	8839359
204	8911179
205	8947229
206	8983209
206	8983419
208	9055099
210	9126989
213	9234719
214	9270769
217	9378779

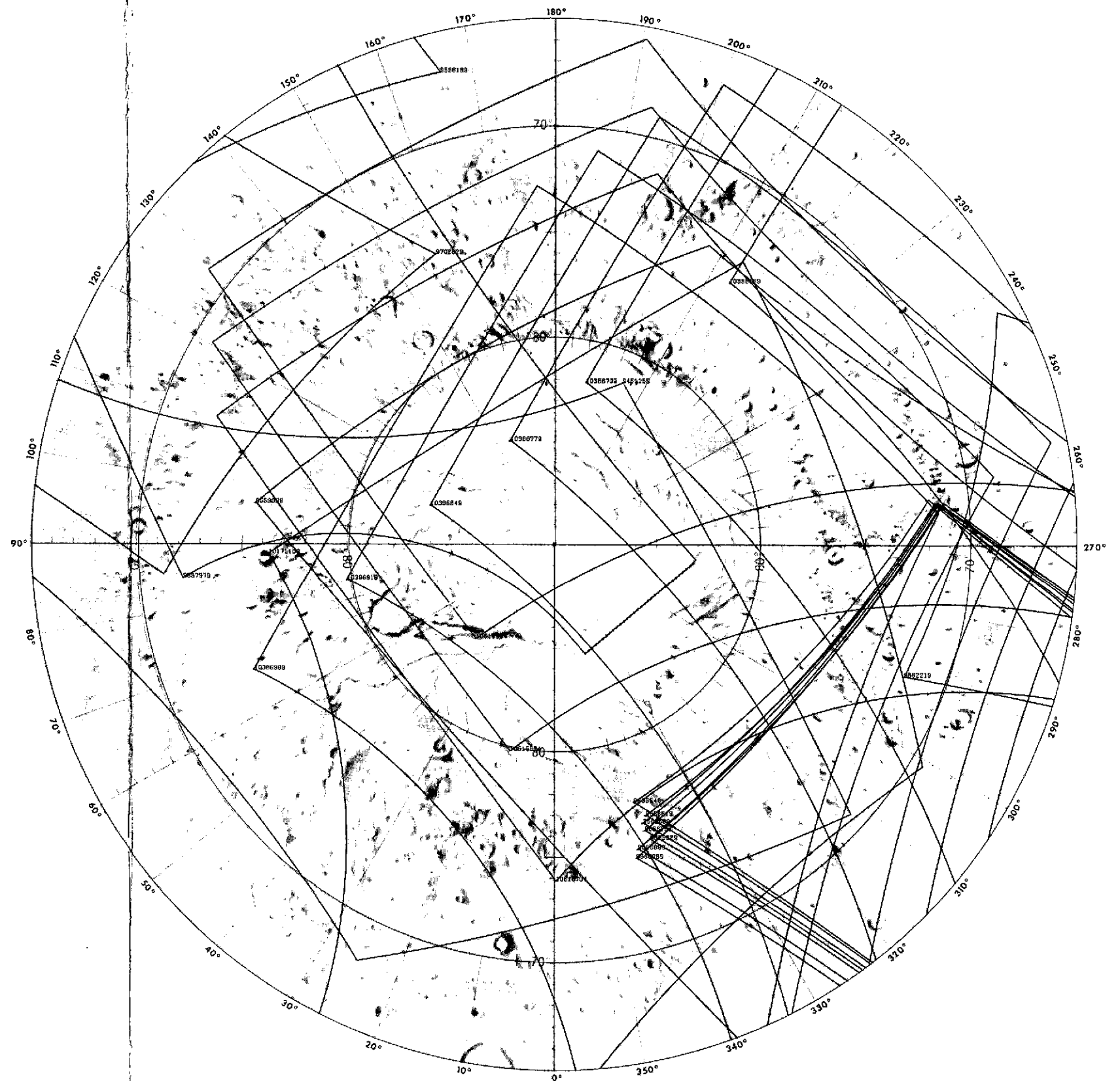
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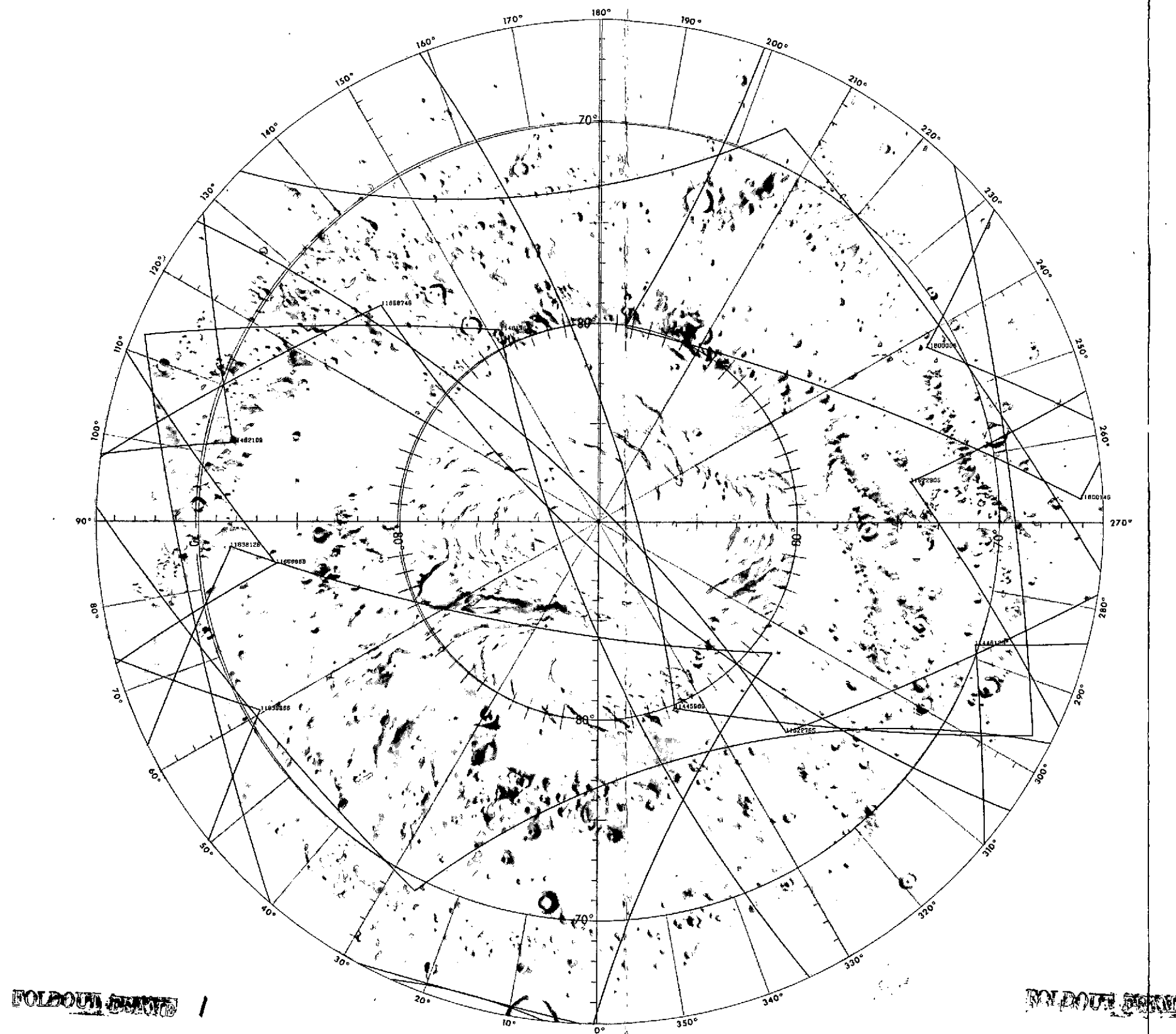
Fig. 28. Mapping Cycle IIIB, Revs 197-217.

NORTH POLAR REGION

EXTENDED MISSION
PHASE 1
REVS 218-262
A CAMERA

REV	DAS TIME
219	9451159
222	9557979
222	9558189
222	9559099
225	9666549
225	9666619
225	9666689
225	9666759
225	9666829
225	9666899
225	9666969
226	9702529
231	9882219
239	10171109
245	10386569
245	10386709
245	10386779
245	10386849
245	10386919
245	10386989
259	10616564
259	10616634
259	10616704





NORTH POLAR REGION	
EXTENDED MISSION PHASE 2A REVS 416-431 NON-GLOBAL A CAM	
REV	DAS TIME
416	11445989
416	11446129
417	11481969
417	11482109
422	11622765
422	11622905
423	11658745
423	11658885
430	11800006
430	11800146
431	11835986
431	11836126

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Fig. 30. Extended Mission, Phase IIA, Non-Global, Revs 416-431.

NORTH POLAR REGION	
EXTENDED MISSION PHASE 2B REVS 436-676 NON-GLOBAL A CAM	
REV	DAS TIME
436	11977004
436	11977144
437	12012984
437	12013124
444	12152882
444	12153092
445	12188792
445	12188932
450	12328401
451	12364311
451	12364451
458	12502270
459	12538250
667	13317545
668	13353315
668	13360385

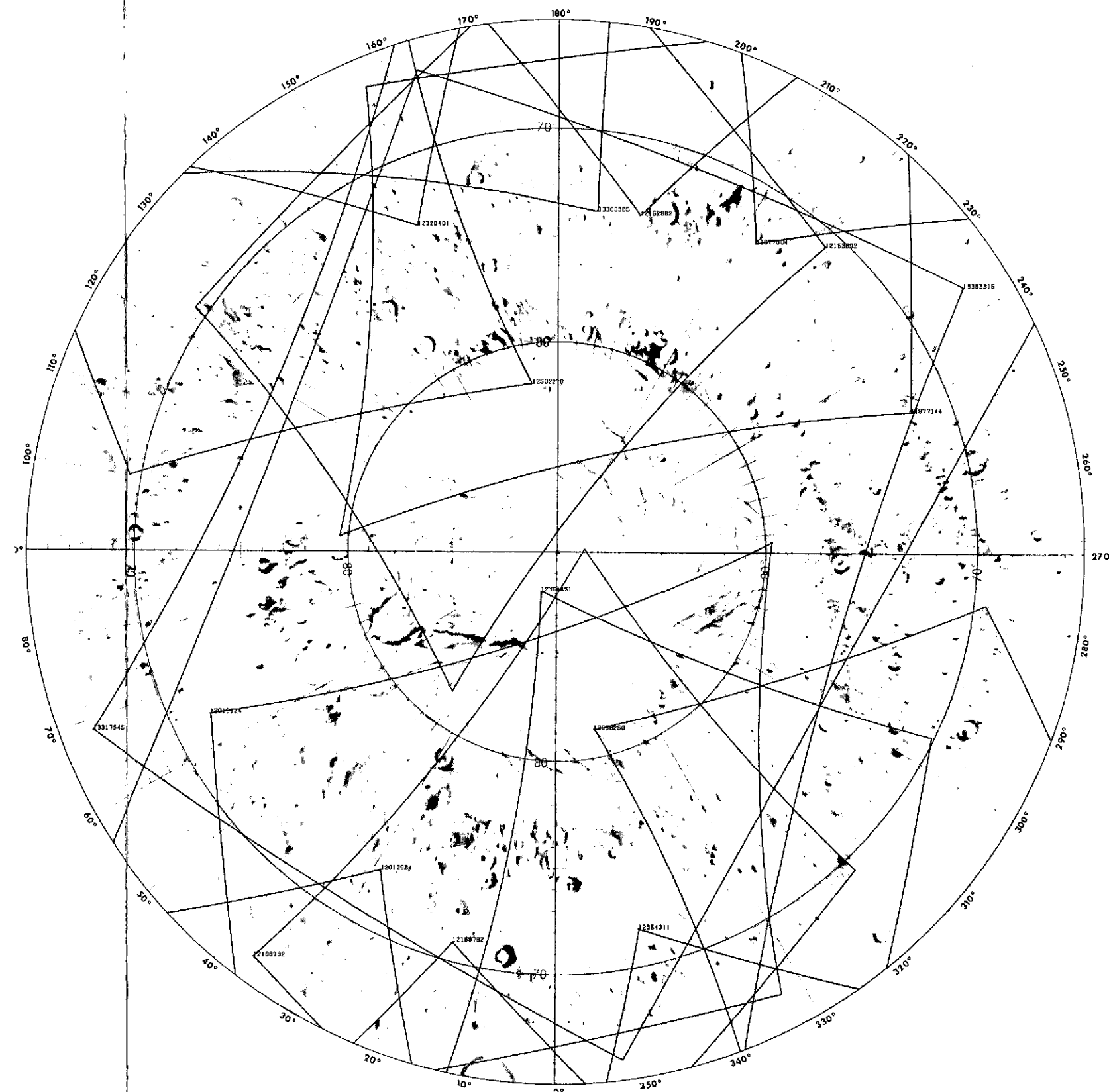
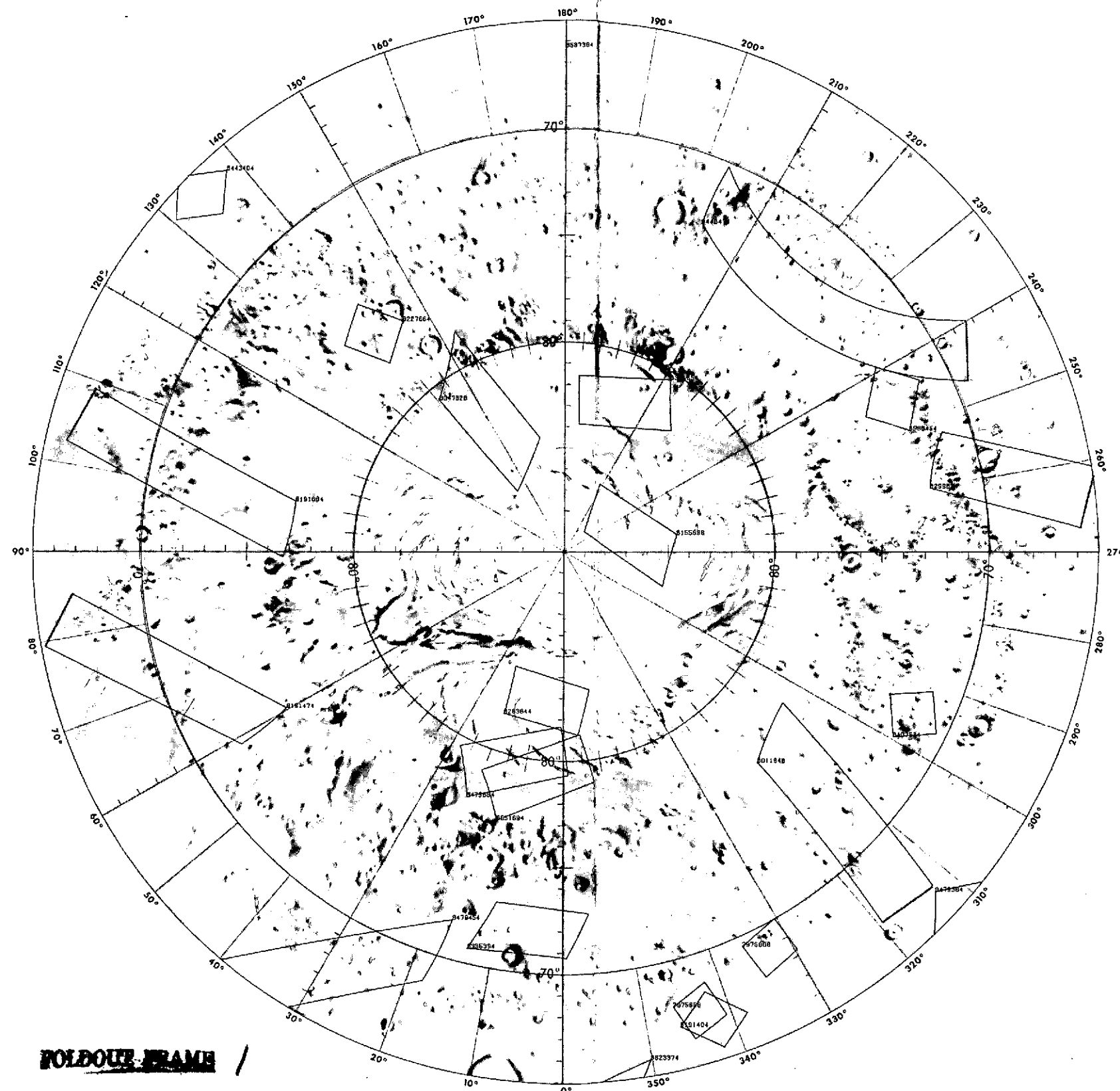


Fig. 31. Extended Mission, Phase IIB, Non-Global, Revs 436-676.

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VI. Polar Stereographic Projections of the North Pole: Narrow-Angle Camera Coverage



NORTH POLAR REGION

MAP CYCLE 3
REVS 178-217
B CAMERA

REV	DAS TIME
178	7975658
178	7975868
179	8011848
180	8047828
183	8155698
184	8191404
184	8191474
184	8191684
185	8227664
186	8263644
187	8299624
188	8335394
189	8371654
190	8407634
191	8443404
191	8443474
192	8479384
192	8479454
192	8479664
194	8551694
195	8587394
196	8623374
206	8983454

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Fig. 32. Mapping Cycle III, Revs 178-217.

